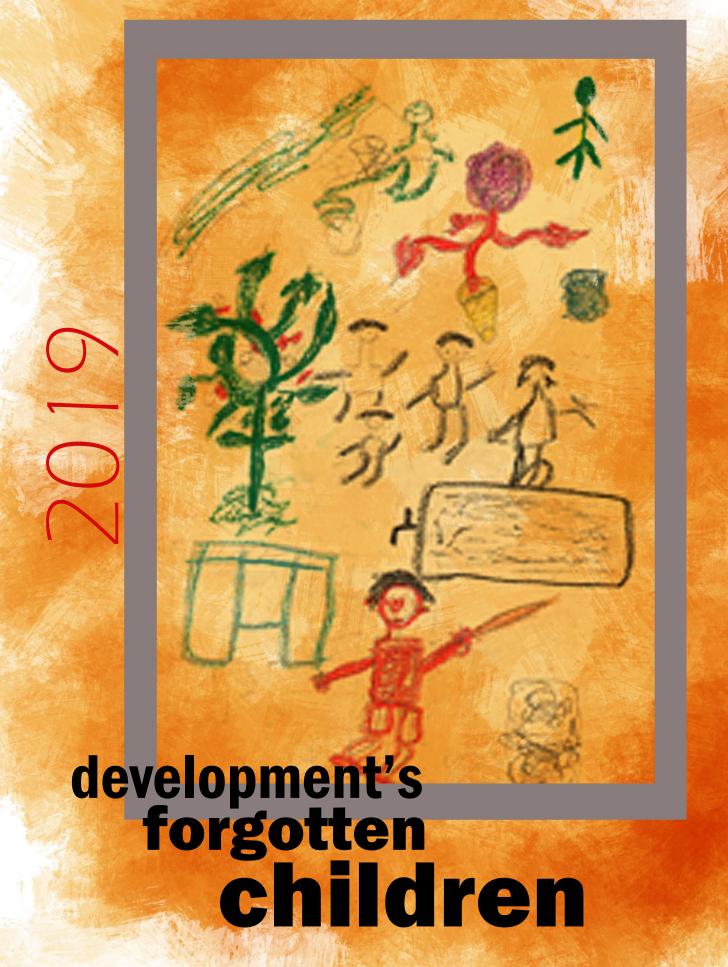






CHILD LABOUR IN BT COTTONSEED
PRODUCTION IN NORTH GUJARAT AND
SOUTH RAJASTHAN



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CHILD LABOUR IN BT COTTONSEED PRODUCTION IN NORTH GUJARAT AND SOUTH RAJASTHAN 2019

Development's forgotten children

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2	Organizer 2, Idar	08.09.2017 Idar	Prof. Ernesto, Muneeb
3	Organizer 3, Idar	1 st interview: 08.09.2017 Idar	Prof. Ernesto, Muneeb
		2 nd interview: 29.12.2017 telephonical-	Saikat, Muneeb
		ly	
4	Organizer 4, Diyodar	1 st interview: 08.10.2017 Diyodar	Saikat, Muneeb
		2 nd interview: 29.12.2017 telephonical-	Saikat, Muneeb
		ly	
5	Organizer 5, Gandhinagar	29.12.2017 telephonically	Saikat, Muneeb
6	Organizer 6, Idar	29.12.2017 telephonically	Saikat, Muneeb
7	Organizer 7, Idar	04.01.2018 telephonically	Saikat, Muneeb
8	Organizer 8, Idar	05.01.2018 telephonically	Saikat
9	Social Activist, Khedbrahma	09.09.2017 Khedbrahma	Prof. Ernesto, Muneeb
10	Met 1, Jhadol	21.11.2017 Jhadol	Prof. Ernesto, Muneeb, Saikat
11	Met 2, Dungarpur	23.11.2017 Dungarpur	Prof. Ernesto, Muneeb, Saikat
12	Met 3, Dungarpur	23.01.2018 Kalol	Saikat, Muneeb
13	36 child workers in Udaipur and Dungarpur districts	21.11.2017, 22.11.2017 and 23.11.2017 in Udaipur and Dungarpur districts	Prof. Ernesto, Muneeb, Saikat

Foreword

hildren engaged as child labour in production of Bt. Cottonseed are crying to be heard. They are young children boys and girls who have been robbed of their childhood working day in and day out. They want to have friends, aspire to go to school and be part of web of interactions where they can seize opportunities. The wellresearched and documented study 'Child labour in Bt Cottonseed production in North Gujarat and South Rajasthan, 2019' shows the challenges that children working on cottonseed farms confront and gives an account of the dramatic changes in cropping patterns in production of Bt cotton seeds as well as invisibilation of child labour over a period of time.

About two decades ago it was found that multi-national corporations such as Monsanto, Bayer, Unilever, Syngenta and national seed production companies such Nuzveed made profits on the backs of young girls and their exploitation in Andhra Pradesh. There was an expression of shock and outrage on their suffering and appalling conditions of work and pressure built on the companies, both locally and globally. This led to reduction of production of Bt cottonseed in Andhra Pradesh and also that of reduction in child labour. Yet, child labour did not end once and for all. The companies shifted to Gujarat at Banskanta and Sabarkanta districts and girls were being trafficked from neighbouring Dungarpur district in Rajasthan to work on the farms. The plight of children who were trafficked, their work conditions, violence and abuse in their daily lives in the farms was highlighted by Dakshin Rajasthan Mazdoor Union who mounted pressure on the companies against child labour and child trafficking. They brought the issue to the notice of the National Commission for Protection of Child

Rights on the one hand and unionised with the 'mets' sensitising them not to traffic children.

Once again, this pressure resulted in reduction of the area of cottonseed production in these areas but it did not end child labour.

The extant of Bt cottonseed production currently is in the states of Andhra Pradesh, Telangana, Tamil Nadu and Karnataka in south India and in Gujarat and Rajasthan in western India. According to the study Gujarat has nearly 60-65,000 acres of cottonseed growing area and '25 -30 national companies and MNCs share the majority of the cottonseed market in Gujarat, out of which 12-15 large-scale corporations have almost 70 percent market share. Some of these prominent national-level companies are Ajeet, Bioseeds, Nuziveedu, Tulsi, Ankur, JK, Rasi, Kaveri, Ganga Kaveri, Nath seeds, Greengold, and so on; while in MNCs it is mostly Bayer after the exit of Monsanto from cottonseed business'. Child labour is still rampant. During seasons of cross pollination and harvesting children are forced to work and schools become empty. There is no effort to keep children in schools.

The present study focuses on a survey of 113 plots (97 tribal, 16 non-tribal) and 795 workers in four districts – Banaskantha and Sabarkantha districts in North Gujarat, Udaipur and Dungarpur in South Rajasthan of whom 12 percent and 20 percent are child and adolescent labour respectively. In a way 32 percent of workforce continue to be children. It shows the resilience of the investors who have come up with new forms of process of organization and production of Bt cotton seed. The study reveals that majority (70 percent) of production has shifted to tribal villages of North Gujarat and South Rajasthan and thus a shift of production from large, non-tribal commercial farms to small, family-owned tribal



farms. This has impacted the composition workforce, from a predominant migrant labour to family labour. The study has captured how such a shift has had adverse effect on tribal families rendering them vulnerable and dependent on the organisers. It shows how the entire family have been totally alienated from their own land, can no longer decide what and how they want to grow, how they are unfree and are enslaved in their own farms. Children are the worst effected in such a scenario.

Is there a hope for children working on these farms? It is in this context that there is a need to utilise the existing laws to the fullest to protect children and their rights. The amended Child Labour (Prohibition and Regulation) Amendment Act in 2016 prohibits the engagement of children in all occupations and processes up to 14 years of age just so that they would enjoy their fundamental right to education under the 'Right of Children to Free and Compulsory Education Act, 2009.' Further, it extends to cover adolescent child labour in the 14 to 18 years of age numbering 32.3 million children. It also makes engaging child labour a cognizable offence punishable with imprisonment for a term not less than six months to extend to two years or with fine not less than Rs. 20,000 to 50,000 or with both. However, in introducing a proviso allowing children up to 14 years to work after school hours or help in family in fields, home-based work, forest and so on it has diluted the very sprit of the law.

Due to the hue and cry raised by several sections of the civil society the rules of the amended child labour act have made a clarification on what 'helping the family' actually constitutes. Among several points the rules states that in helping the family the child 'shall not be en-

gaged in such tasks...which hinders or interferes with the right to education of the child, or his attendance in the school, or which may adversely affect his education including activities which are inseparably associated to complete education such as homework or any extracurricular activity assigned to him by the school... or for any payment or benefit to the child or any other person exercising control over the child, and which is not detrimental to the growth, education and overall development of the child'. This section of the rules must be publicised and children's right to education has to be reiterated constantly.

The Report provides concrete evidence of child labour in spite of the laws and policies. It shows how there is a continuous tussle between the powerful forces and networks in the market that comes up with forms of exploitation that are devious and hidden and defenders of children's rights. The evidence given in studies such as this gives all defenders of children a tool to pressure the State to fulfil its obligations as guaranteed by law and render justice to children.

Shantha Sinha

Former Chairperson National Commission for Protection of Child Rights Govt of India

Part 1 Background



Child labour in BT cot

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INTRODUCTION

ndia is the world's largest cotton producer since the last three years and accounts for about one-fourths of the total cotton produced in the world. In December, 2017 the estimates of area under cotton production show that India has close to 115.5 lakh hectares of land area under cotton production, which is roughly 35 percent of the total world estimate. Although, yield wise, India lags behind the world average level by 30 percent, it surpassed China in total volume of production in 2014-15. China has triple and double yields compared to that of India and the world respectively (ICAC 2017). Indian cotton production immensely increased with the advent of Bt cotton, the first genetically modified crop approved for production in the year 2002-03, which tripled the country's cotton production from 13 million bales in 2003 to 40 million bales in 2015, a yield gain of 31 percent (GEAC 2017). In fact, cotton area was on the decline due to frequent bollworm infestations and outbreaks. In 2002-03 it had reduced to 78 lakh hectares. With Bt cotton farmers realized high yield and massive reduction in expenses incurred on insecticides. Within a decade the production area had multiplied by almost one-and-a-half times and the yield jumped from 190 kg/ha in 2000-01 to 461 kg/ha in 2014-15 (Deshpande 2017; GEAC 2017; Kranthi 2012). Today around 82 percent of the total area under cotton grows Bt hybrids, while the remaining is mostly under desi variety and other hybrids (GOI 2017). In order to meet the demand of Bt cotton in the country and abroad, Bt cottonseed production was also officially introduced in 2002-03. Genetically modified (GM) seeds are those where certain genes are modified to develop traits such as a resistance to pests and herbicide, and increased productivity.

However, hybrid cottonseed production has a much older history in India. In 1970, the first hybrid cotton by the name H4 was commercialized in India. It was produced by CT Patel at the Surat agricultural experiment station of the Gujarat Agricultural university. Soon thereafter in the late 1970s and early 1980s a number of location-specific hybrids were released by the public sector and sold by state seed corporations (Lalitha et al. 2009). Maharashtra Hybrid Seeds Company Private Limited (Mahyco) was the first private player to get commercial rights in 1979 for MECH 11 (Murugkar et al. 2007). Since early 1990s the retreat of public sector from seed production and distribution was noticeable in many developing countries (Morris 2002). The 1991 economic reforms lifted barriers to investment by foreign as well as large Indian firms. The introduction of plant breeders' rights through the 'Plant Variety Protection Act' and the commercialization of plant biotechnology products also enhanced the advantages of large firms (both foreign and domestic) with formidable marketing and technological capabilities (Murugkar et al. 2007). Soon the private sector was able to establish a successful model of hybrid seed development, production and release, and tap the market opportunities left unexploited by the public sector. Thus long before Bt cotton arrived, cotton growers in India were familiar with hybrid seed and with the practice of purchasing seed from dealers every year (Lalitha et al. 2009).

The production and marketing of Bt cottonseed in India is almost fully under the control of the private sector. 98 percent of the total cottonseed produced and marketed in India is managed by private players. Multi-national companies (MNCs) like Monsanto (until recent past) and its Indian collaboration Mahyco Monsanto Biotech (India) Private Limited (MMBL), Bayer, Syngenta, Dupont, and domestic companies like Nuziveedu, Rasi, Ajeet, Kaveri, Ankur, Namdhari, Kalash seeds, Advanta, are some of the names (Venkateswarlu 2015). It was first the public sector and later the private seed companies who preferred to "value capture" the hybrid cotton industry by installing a parallel cottonseed industry (Kranthi 2012). Bt cottonseeds cannot be reused without major yield reductions, thus leaving Bt cotton growers with no choice but to repeatedly purchase new seeds every season. The evolvement of Bt cottonseed as a full-fledged privately controlled industry within the Indian cotton chain is synchronous with some early remarks made about the gain of corporate control over Indian hybrid seed industry (Shiva et al. 1999).

THE BT COTTONSEED INDUSTRY

The Bt cottonseed industry in India is characterized by a technology market and a seed market. Technology providers like MMBL, JK seeds, Metahelix, Nath seeds and Central Institute of Cotton research license their technology to domestic seed companies. Technology providers create a host of donor Bt cottonseeds and based on their



patent rights, distribute them to seed companies under agreements. Seed companies use these donor seeds to create desirable genetic trait, i.e., bollworm resistance, into their own specific hybrid varieties by backcrossing. These seed companies are entitled to register such variety under the PPVFRA. The new plant variety registration, however, does not eliminate the technology provider's upstream patent rights, at the same time the patent right cannot override the plant variety protection. Apparently, the seed compa-

SEED MARKET

Hybrid cottonseed production in India is concentrated in six states, Gujarat and Maharashtra in the central part of India, and Andhra Pradesh, Telangana, Tamil Nadu and Karnataka in South India. These six states account for nearly 95 percent of total cottonseed production in the country. Presently it is Gujarat which is the largest producer of Bt cottonseed in

the country, followed by Andhra Pradesh (Venkateswarlu 2015). As Gujarat is the home of the first cotton hybrid (H4), numerous hybrid varieties held sway among Gujarati cotton farmers for a long time. Even before the official approval of MMBL's Bt gene in 2002, by mid-Oct 2001, unauthorized Bt cotton hybrid was discovered in Gujarat (Lalitha et al. 2009). The illicit varieties were in use for quite some time and had spread to thousands of hectares in Gujarat (Herring 2005). Illegal Bt seeds, which are priced cheaper as well as effective, pose severe threat to its legal varieties. Farmers produce local variants of Bt cottonseed by crossing Bt-containing seeds with existing hybrid cotton varieties, and these are quite popular and sell vigorously in the local markets (Lalitha et al. 2009; Murugkar et al. 2007).



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According to recent literature, Gujarat seems to be the preferred place for cottonseed production because of greater productivity and better quality of cottonseeds in the state as compared to other states (Venkateswarlu 2010; Venkateswarlu 2015; Venkateswarlu & Kalle, 2012). Cottonseed production is labour-intensive. In Gujarat, large cottonseed farms have thrived on availability of cheap migrant labour from south Rajasthan, especially child labour, until recent past (McKinney 2013; Venkateswarlu 2010; Venkateswarlu 2015). Major seed companies of India and MNCs have investments in Gujarat, along with the prevalence of various local companies too. Until recently, Gujarat had nearly 48,000 acres of cottonseed-growing area, the largest in the country, followed by Andhra Pradesh (including Telegana, which has 17,000 acres). MNCs and private Indian companies controlled 98 percent of this production area (32 percent by MNCs and 66 percent by Indian companies), and in two percent of the area cottonseeds were grown for public sector corporations. Major seed players of the MNC category were Bayer, Monsanto, Advanta, Dupont and Mahyco, while Indian companies were Ajeet, Nuziveedu, Ankur, BioSeeds, Tulsi and Vikram. Traditional seed producing areas are mainly concentrated to non-tribal areas such as Idar, Vadali, Himmatnagar taluks in Sabarkantha district, Mansa in Gandhinagar district, Vijapur and Kheralu in Mehsana district, Diyodar and Kankrej in Banaskantha district. The emerging areas were mostly in tribal belts in Lunawada in Mahisagar district, Jambhuguda in Panchmahal district, Pavejetpur and Bodoli in Chota Udaipur district, Khedbrahma in Sabarkantha, Bhiloda and Meghraj in Aravali district (Venkateswarlu 2010, Venkateswarlu 2015). Major developments noted were the shift of production from large, non-tribal commercial farms to small, family-owned tribal farms. There was a decline in the average size of plots as production shifted to tribal areas where the average size is about 0.25 acres, compared to around two to three acres in non-tribal. There was subsequently a change in workforce composition, as it shifted from a predominant migrant labour to family labour (Venkateswarlu 2015).

CHILD LABOUR IN THE COTTONSEED INDUSTRY



The issue of child labour has been a pervasive problem in India as well as in the rest of the world. ILO's World Report on Child Labour (2015) estimated that around 168 million children in the world were trapped in child labour. The Census of India (2011) revealed that there were 10.1 million child workers in India. The numbers reflect a decline compared to the Census of 2001, which reported 12.7 million child workers in the country. However, there are studies which question the validity of these official claims. Saharia (2014) points towards the variation in the estimates among the different official statistics: it is 12.7 million/10.1 million as per the Census of India, 2001/2011, 9.2 million according to the National Sample Survey, 2004-05, and 22.2 million as per the National Family Health Survey, 2005-06. The differences are due to variations in the definition of 'child labourer' and the method of data collection. Census data and NSS data treats children working for pay as workers and do not include children who do household or agricultural work. This tendency is probably due to exemptions for such cases in the Child Labour (Prohibition and Regulation) Act (CLPRA), 1986. The NFHS takes into account all kinds of child labour -



paid/unpaid, household/non-household, agricultural/non-agricultural, and thus is more comprehensive. The difficulty in assessing the extent of child labour makes the problem even worse. Child labour is a complex phenomenon involving ethical, economic, legal and political challenges (ILPI 2015). The problem becomes especially severe in the context of abject poverty. Poverty forces children to engage in labour while their participation upholds the cycle of poverty (ibid).

While child labour is prevalent across industries, the commercial cultivation of hybrid cottonseed industry emerged as the single largest sector employing child labour in India (Venkateswarlu, 2010). The use of child labour in cottonseed production is widespread in all the major cottonseed-producing states in India (UNICEF 2014).

The incidence of child labour has been reported in all the major states involved in cottonseed production – Andhra Pradesh, Gujarat, Tamil Nadu and Karnataka (Khandelwal et al. 2008). A recent study by Venkateswarlu (2015) reports child labour in Bt cottonseed farms in Rajasthan. Rajasthan was earlier used only as source of child labour for Gujarat, but now Bt cottonseed production has shifted to the tribal villages in Rajasthan as well (Kujur & Kumar 2015; Venkateswarlu 2015). The focus of this study is on child labour in the state of Gujarat.

EMPLOYMENT OF CHILDREN AND NATURE OF WORK

Hybrid cottonseed production is a labour-intensive process. The children are recruited for manual cross-pollination work, which is carried out regularly in specific months (for two-to-three months). The cross-pollination involves emasculation (performed in the evening shift) and pollination (performed in the morning shift). Work in the hybrid cottonseed industry has effectively been labelled as 'children's work' (McKinney, 2014).

There are a variety of rationales put forward for employing children in this work:

1.Reduction in labour costs: Labour costs become important due to two reasons: the production is labour intensive and there exists a shortage of labour. Labour costs constitute about 50 percent of the total cultivation cost (Venkateswarlu, 2007). The employers, thus, seek to reduce the labour cost by employing children. The children work more intensively and are paid much lesser than adults. This also leads to a decline in the wages of the adult workers (Singh, 2003;

^{1.} http://www.ilo.org/ipec/Informationresources/WCMS_358969/lang--en/index.htm

^{2.} http://www.childlineindia.org.in/Child-Labour-India-growth-story.htm

^{3.} Met' is the term used locally for the middleperson between labour and farmer. A met arranges the labour from tribal villages for work on the hybrid cottonseed farms, transports them to the farms and back to their villages at the end of work, and pays the workers on behalf of farmer. The mets receive commission for their work, usually a certain agreed amount per worker, from the farmer.



Venkateswarlu & Ramakrishna, 2015). When we interacted with farmers and *mets*, they mentioned that adult workers prefer to work in nearby towns and cities, as the wages are higher in the jobs available in cities and towns. The hybrid cottonseed work provides lower wages and is thus is effectively left to be done by children.

2.Appropriate bodies: The children's height and their flexible bodies make them suited and more able for carrying the work effectively as compared to adults, as they don't have to bend to cross-pollinate the flowers (Burra, 2008). Children also have 'nimble fingers', which are claimed to be appropriate for proper pollination (Khandelwal et al., 2008; Venkateswarlu, 2007).

3.Compliant workforce: Workers are made to stay in impoverished makeshift shelters on the field, work in the scorching sunlight, and in long shifts. The farmers thus prefer child labour, as they are non-rebellious, vulnerable, and compliant, in other words, easy to control (Burra, 2008; Khandelwal et al., 2008). The children are bullied, beaten, and harassed for effective control.

OBJECTIVES

The major objectives of this study are as following:

i.To look into the relevance of cottonseed production for the economy and employment in India and Gujarat and the structure of cottonseed production, particularly the relevance of private and public actors in cottonseed production and that of GM cottonseed.

ii.To find out the number of children employed on cottonseed farms in the focus areas of this study.

iii.To examine whether children are employed on cottonseed farms producing for international

companies (like Monsanto).

iv.To observe in greater detail the working and living conditions of the children. The consequences of migration and hard work for the children are looked into. The difference between the working conditions for children and those of adults is also examined.

v.The process of recruitment of child labourers and their work is delved into in detail.

vi.Finally, the measures undertaken towards the improvement in the condition of child labour after publishing the first report on child labour (Khandelwal et al. 2008) is also highlighted and the developments during the last ten years in relation to child labour is documented.

METHODOLOGY

Based on the nature of objectives and the previous study (Khandelwal et al. 2008), the methodology of this study involved collection of primary data through surveys and interviews. Three separate survey forms were designed: the plot survey, worker survey and the village survey. A two-day workshop was conducted to train the investigators as well as to seek feedback based on their experience, to effectively design the interview schedules. The initial plan was to cover 10-sub districts, 100 villages and 5,000 households. However, due to lack of enough investigators and some invalid data, the final data collected represents six sub-districts, 62 villages and 3,822 households, with the help of 8 investigators. Further, in the data collected by these eight investigators, village level data of 14 villages were found invalid. The data contained inconsistencies related to the estimates of cottonseed labour, which was disproportionate with the overall village population. Given that the majority (70 percent) of production has shifted to

^{4.}Initially, 11 investigators were supposed to collect the data; however 3 investigators dropped out. We tried to follow up with them but due to lack of response from their side we had to manage without them.

^{5.}Organizer refers to the middleperson between hybrid cottonseed companies and farmers. The organizers provide the foundation seeds to the farmers and buyback the hybrid cottonseed produced by farmers. They send the seeds to companies for testing before paying the farmers. In some cases they also provide fertilizers to the farmers. Most of the organizers we interacted with also owned ginning factories. (See list of interviews on page 5)

tribal villages of North Gujarat and South Rajasthan, data collection was focussed on the regions of Sabarkantha and Banaskantha districts in Gujarat and Udaipur and Dungarpur districts in Rajasthan.

Survey data was used to estimate the extent and depth of child labour on cottonseed farms. We interviewed seven organizers to understand the production process, production areas and labour supply issues. The objective of the study was also to explore the experiences of the children working in the hybrid cottonseed farms. The children were shy and often reluctant to share their experiences, especially to strangers (researchers). Some of the children were too young to understand or articulate their experiences. Therefore, we conducted drawing exercises with children from five source area villages. The children were given drawing sheets, pencils and colours to draw whatever they wanted related to the hybrid cottonseed work and experiences on the farms. Thereafter, the researcher, along with the investigator familiar with the local language talked with the children regarding their drawings. Three mets were also interviewed to understand the labour supply, work conditions, and child labour issues, to substantiate the qualitative data collected from the workers.

LIMITATIONS

Collecting data regarding sensitive issues like child labour is a task that is always difficult to carry out. Farmers and organizers openly denied the use of child labour in their cottonseed farms. The team of local investigators, who were requested to conduct the plot surveys, also received sceptical treatment from farmers of their locales and were given limited entry into the farms. Often, the farmers would instruct the children working in his/ her plot to hide in case any visitor would arrive. In Gujarat, many farm owners also surround their plots by boundary walls, and it is not possible to assess labour being used in each farm by just taking a stroll around the village. Moreover, for outsiders like the principal investigators, farm accessibility was further diminished in the absence of suitable intermediaries. Therefore, very few data could be collected from non-tribal plots. We, however, relied more on worker data (that is, the one collected from source region), which was quite detailed and explicit, to make up for this deficit.

Thus, the first limitation of the plot study is that it represents the incidence of child labour, as reported by farmers. The direct access and counting of child labour on farms was not possible



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due to multiple reasons: the reluctance of farmers to allow researcher/investigator access to the farms where the pollination work was going on, disruption in the pollination period in one of the production areas (Banaskantha) due to floods in the period of this survey, or the children would hide or run away in the fields where they were working. The farmers and organizers out rightly denied any incidence of child labour; however the interviews in source areas revealed that children were still migrating to farms in Gujarat for hybrid cotton seed work as reflected in the data.

Tribal plots using child labour is more complex than non-tribal plots. Here children working on plots could be disguised as family labour helping in farms outside of school hours. Thus, plot data of tribal farms show less child labour than how much there actually is. Due to this, plot data, which is primarily tribal plot data, shows very little percentage of child labour. However, when we see the worker data, child labour is substantial, and this explains for itself.

The company mapping was difficult due to reluctance of organizers to share their own data regarding the companies and their production areas. The farmers were often unaware of the company that they were producing the seeds for.

Inability of the researchers to pick up the local

dialect proved to be a major impediment to conducting qualitative interviews with children. Although interviews were based on the children's drawings and took place with the help of local investigators as translators, attaining the perfect environment for qualitative interviews remained elusive. Also, researchers' foreignness was another impediment for children to open up for sharing their experiences. Moreover, during the plot visit, principal investigators noted that many farmers did show their intent to share their experiences, which the investigators were unable to gather as they could not understand the local dialect. As per the research design, farmers were approached through local investigator mainly to collect survey data and not for qualitative interviewing. But during such exercise, farmers also spoke about their Bt farming experiences in conversations with the local investigator. Since principal investigators did not know the local dialect, they lost some qualitative data. However, every possible effort was made by them to retrieve it afterwards from the local investigator.





Child labour in BT

findings



COTTONSEED PRODUCTION IN GUJARAT: PRESENT AREA AND PRODUCTION

recent study (Venkateswarlu 2015) has documented Gujarat as the state producing the highest quantity of hybrid cottonseeds in India with around 48,000 acres under its production. Based on our interviews with organizers, this year Gujarat had nearly 60-65,000 acres of cottonseed growing area. 25-30 national companies and MNCs share the majority of the cottonseed market in Gujarat, out of which 12-15 large-scale corporations have almost 70 percent market share. Some of these prominent national-level companies are Ajeet, Bioseeds, Nuziveedu, Tulsi, Ankur, JK, Rasi, Kaveri, Ganga Kaveri, Nath seeds, Greengold, and so on; while in MNCs it is mostly Bayer after the exit of Monsanto from cottonseed business. These companies sell more than one lakh Bt cottonseed packets per season. There are also around 60-70 small-sized companies selling 50,000 to one lakh Bt cottonseed packets per season.

Cottonseed production in Gujarat can be either based on the geographical region where cottonseed farming is done, or from the region from where it is controlled. Organizers control the production as without them seed companies cannot reach the farmers producing cottonseeds. Organizers distribute the foundation seeds received from the seed company to the farmers, meet various cropping and financial needs of the farmers, provide ginning facilities, send the clean seed to the company, and settle the payment between the company and the farmer.

REGIONAL DISTRIBUTION

Based on previous studies (c.f. Venkateswarlu 2015), the distribution of cottonseed production was purely geographical because cottonseed growing area and organizers' location coincided.

Banaskantha and Sabarkantha were the prominent districts for cottonseed production and organizers were located in the urban hubs near the non-tribal cottonseed plots (Khandelwal et al. 2008; Venkateswarlu 2015). Based on interviews with

organizers, it is clear that now almost 70-80 percent of the cottonseed produced in the state is grown in the tribal belts of north Gujarat, South Rajasthan, and Bodeli. 20-30 percent of cottonseeds are still grown in the non-tribal plots of Banaskantha and Sabarkantha. Organizers have however not moved to tribal regions, but now control a larger geographical area. It is more vivid in Sabarkantha district, where 90 percent of the cottonseed grows in the tribal belts of North Gujarat and South Rajasthan, yet being controlled by organizers located in Idar (non-tribal). The following classification is not purely geographical, but based more on the region from where cottonseed production is organized. Following is a region-wise description:

Banaskantha: Organizers are mostly based in Diyodar and Kankrej. Plots in this part of the state are mostly non-tribal, though some organizers have tribal farmers too on their list. Non-tribal plots are more than 1acre in size, an average of one-to-two acres, while some farmers even have more than five acres. Total acreage is 10-12000 acres. This region accounts for nearly 20 percent of the total cottonseed production in Gujarat. In Banaskantha, cottonseed sowing starts early (15th April to 15th May), which is almost 20-25 days earlier than any other region in the state where it starts at the end of May. For cottonseed cultivation, farmers in Banaskantha primarily depend on irrigation facilities whereas in other areas it is mainly dependent on monsoonal rains. Earlier, Banaskantha used to be a major production area having more than 20,000 acres of cottonseed growing area and contributed almost 50 percent of the total production in the state. The production depended on migrant labour coming from tribal belts of southern Rajasthan and northern Gujarat. Migrant labour would mainly do the manual cross-pollination activity which would start soon after the plants would start flowering. However, it has been more than five-to-seven years now that the labourers who used to migrate for 60-70 days of manual cross-pollination activity, began growing cottonseed in their own home plots

which due to their small acreage, depended solely on their family labour. The present situation is that even if these labourers migrate to non-tribal plots in Gujarat, especially Banaskantha for the cross-pollination work, they do it just for 20-25 days before flowering starts in their home plots because then they have to leave to do the same activity in their home plots. Thus with the shortage of migrant labour, the production area as well as the production cycle, both have shrunk. During the first round of flowering, i.e., during the first week of August, generally when the plant's fertility is the highest, manual cross-pollination is carried out vigorously. But by the end of August or at most by the mid of September, migrant labour starts retreating. Due to this, only the first round of manual cross-pollination takes place in Banaskantha plots, which has forced farmers to either reduce their acreage over the years or shift to other crops. Labour shortage also causes incomplete crosspollination of the whole standing area. Cottonseed balls per plant are less compared to tribal plots where cross-pollination is carried out for the entire flowering season. Nevertheless, cottonseed quality is excellent in Banaskantha because the manual crosspollination takes place when the plant fertility is the highest, plus the farmer accurately and meticulously monitors the whole activity.

Sabarkantha: Organizers are located in and around Idar. Out of the total production area in Sabarkantha, non-tribal plots are 10 percent, in and around Idar and Himmatnagar regions. Tribal plots are 90 percent, hilly areas of northern Gujarat, such as Khedbrahma, Vadali, Ambaji, Poshina, and so on; whereas in southern Rajasthan, areas of Udaipur and Dungarpur districts such as Phalasiya, Bicchiwara, Kherwara that are close to the Gujarat border. Together this widely spread region has nearly 40,000 acres of cottonseed growing area. Average plot size is 0.25 acre. This area accounts for nearly 70 percent of the total cottonseed production in Gujarat. Earlier, in Sabarkantha district, the main areas of cottonseed were the non-tribal plots in and around Idar, Himmatnagar and Bijapur. But with migrant labour shortage, cottonseed area

has drastically shifted to tribal plots (80 percent) where cultivation is managed solely by family labour. Unlike Banaskantha, Sabarkantha's cottonseed growing season depends on monsoon, thus labour which still migrates to Banaskantha for 20-25 days of cross-pollination work is not available to work on Sabarkantha's non-tribal plots, which is the reason behind this skewed tribal-non-tribal distribution.

 <u>Bodeli:</u> Located in Chhota Udaipur district, production is mostly in tribal plots. Total acreage is around 10,000 acres, and accounts for 10 percent of the total cottonseed production in Gujarat.

Our focus in this study was on Banaskantha and Sabarkantha regions.

PRODUCTION SHIFT AND CHANGES

In Gujarat, cottonseed growing areas have quickly shifted to the tribal areas. Farmers and organizers say this is only due to the unavailability of migrant labour, which came in large numbers to do the manual cross-pollination activity. Manual cross-pollination is extremely labour intensive and is the most critical activity in Bt cottonseed production. In the non-tribal area, plots are on an average one-to-two acre in size, while some farmers even grow it on more than five acres. On these large sized plots, growing cottonseed requires sufficient labour. Based on previous studies (c.f. Khandelwal et al. 2008; Venkateswarlu 2015), as well as our data, a one acre plot needs 10-12 labourers or even more, particularly during the flowering season when manual cross-pollination is vigorous. Migrant labour is suitable because the activities involve early morning and late afternoon work, sometimes extending beyond 10 hours of work per day. Local labour is unwilling to put this much time, plus they have access to other options like MGNREGA, and so on.

Productivity-wise, tribal areas have an edge over non-tribal areas due to full availability of labour during the entire flowering season. Organizers say

Development's forgotten children

that tribal plots show almost 350 Kg of cottonseed per acre, compared to 250 Kg per acre in non-tribal plots. However, quality wise cottonseeds of tribal plots are inferior to non-tribal plots, which is revealed during the germination tests performed at the company location, and due to which lot rejection rate is more for tribal plots.

GMS (Genetically male sterile) cottonseed production is also gradually picking up. This year Ankur seeds company has predominantly produced the GMS instead of the manually cross-pollinated Bt variety. In manual cross-pollination, due to emasculation activity, requirement of labour is more. GMS varieties are almost equal in productivity, i.e., an acre of plot produces around 300–400 kg of seeds. Bt cottonseeds are purchased back by seed companies at Rs 430–450 (6.59 – 6.90 USD) per kg, while GMS seeds at Rs 300–325 (4.60–4.98 USD) per kg.

INCIDENCE OF CHILD LABOUR LABOUR DISTRIBUTION

The data collected for the study involved plot as well as source area surveys. The source area surveys consisted of worker data as well as village-level estimates of labour working in Bt hybrid cottonseed farms. Table 1 shows the distribution of labour based on the three types of survey data collected.

The plot survey covered 113 plots (97 tribal, 16 non-tribal) and 795 workers. The survey covered four districts – Banaskantha and Sabarkantha districts in North Gujarat, Udaipur and Dungarpur in South Rajasthan. The data suggests 12.20 percent and 19.75 percent of child and adolescent labour respectively. However, these estimates lie on the lower side, as the farmers don't acknowledge child or adolescent labour. The worker data survey,

Table 1: LABOUR DISTRIBUTION						
	Pl	ot data	Wo	orker data	Vill	age data
		Percentage		Percentage		Percentage
Total labour	795	100	569	100	4644	100
Adult (males)	288	36.23	117	20.56	1160	24.98
Adult (females)	253	31.82	73	12.83	876	18.86
Adolescent boys	85	10.69	155	27.24	1391	29.95
Adolescent girls	72	9.06	74	13.01	675	14.53
Children (boys)	47	5.91	84	14.76	255	5.49
Children (girls)	50	6.29	66	11.60	287	6.18
Total child labour	97	12.20	150	26.36	542	11.67
Total adolescent labour	157	19.75	229	40.25	2066	44.49
Total child & adolescent labour	254	31.95	379	66.61	2608	56.16
Total adult labour	541	68.05	190	33.39	2036	43.84
Total female labour	375	47.17	213	37.43	1838	39.58
Total male labour	420	52.83	356	62.56	2806	60.42

Genetically male sterile. Hybrid seed production by nonconventional (male sterility based) method. This eliminates the process of emasculation since the anthers are sterile in female parent without pollen. Thus the cost of hybrid seed production can be reduced. However, pollination has to be done manually. For more information please see http://www.cicr.org.in/pdf/hybrid_seed_production.pdf

Table 2: CHILD AND ADOLESCENT WORKERS (1)							
	Plot Data		Worker Data		Village Data		
	Child labour	Adolescent labour	Child labour	Adolescent labour	Child labour	Adolecent labour	
Percentage	12.2	19.7	26.4	40.3	11.7	44.5	
Number	21,960	35,460	47,520	72,540	21,060	80,100	

Table 3: CHILD AND ADOLESCENT WORKERS (2)							
	Plot		Worker		Village		
	Child labour	Adolescent labour	Child labour	Adolescent labour	Child labour	Adolescent labour	
Percentage	12.2	19.7	26.4	40.3	11.7	44.5	
Number	57,340	92,590	1,24,080	1,89,410	54,990	2,09,150	

	TABLE 4: OUR STUDY VIS-A-VIS OTHER STUDIES							
	Venkateswar- lu (2003)	Venka- teswarlu (2007)	Khandelwal et al. (2008)	Venka- teswarlu (2010)	Venka- teswarlu (2015)	Our study (2019)		
Workers/ plots	384/20	1,082/60	604/	1,187/140	854/120	569		
Child labour (%)	34.9	32.7	32.9	24.6	21.5	26.36		
Adolescent labour (%)	31.8	33.4	42.1	34.4	31.1	40.25		
Child labour estimate	91.000	85.340	83.333	91.200	110.400	124.080		
Adolescent labour esti-	83.200	87.850	105.250	125.400	163.200	189.410		

which covered 569 workers, represents 26.36 percent and 40.25 percent respectively. Similarly, the village level data suggests 11.67 percent and 44.49 percent respectively among the estimated 4644 workers. All the three child labour percentages are below those reported in the study by Khandelwal et al. (2008), which had found 32.9 percent child workers among a total of 604 workers. Apart from village level estimate the adolescent labour percentages are also lower than Khandelwal et al. (2008) study, which had mentioned 42.1 percent adolescent labour out of a total of 604 workers. Also if we consider ILO's definition, which covers child workers as children up to the age of 15 years, the worker data reveals the percentage of child workers children as 40 percent.

The total area of production is approximately 65,000 acres. The distribution based on the interviews with organizers suggests 18,000 acres in the non-tribal areas. The family members carry out the work in the tribal areas, thus employment of own children is not covered under child labour according to Indian labour laws. From the earlier studies and our interviews on an average 10 workers are required per acre. Table 2 reveals data on child labour in non-tribal areas.

However, if we consider the tribal areas as well, the estimation for child and adolescent labour is higher, as shown in Table 3.

The children who go to work on the farms of Gujarat also work on their own family farms. This is due to gap of pollination season facilitated by the water availability. Taking this into consideration the



above table represents the lowest estimates by subtracting the migrant workers from the overall calculation to avoid double counting.

Data in Table 4 shows a decline in child labour from the predecessor research (Khandelwal et al. 2008) however, there is an increase in both child and adolescent labour from Venkateswarlu's (2010; 2015) study. The difference could be due to the difference in estimation methods. Venkateswarlu (2010; 2015) study used child labour/per acre to calculate the extent of child labour. We did not use the child labour/acre method due to two reasons: the general reluctance of farmers to share the child labour related data and the flooding that occurred this year in Banaskantha region disturbed the pollination schedule therefore collecting such data was not feasible. We have used the source area worker data percentages to calculate the child labour incidence. The higher incidence reported in our study can also be due to shift in the production areas. This reflects in the decrease in production areas in Gujarat. The Venkateswarlu (2010; 2015) study has used the plot data from Gujarat, which

excludes the labour in the farms of the source areas. Our data includes the source region and production areas as well. The data shows an increase in both the child as well as adolescent labour. It should be borne in mind that the decreasing trend observed (Venkateswarlu, 2010; 2015) after the Khandelwal et al. (2008) study was due to joint efforts of Dakshini Rajasthan Mazdoor Union (DRMU), National Commission for Protection of Child Rights (NCPCR) and local media. This will be discussed in detail later on in the report.

AGE AND GENDER DISTRIBUTION & FEMINIZATION OF LABOUR

Table 5 shows the age-wise distribution of child labour as captured in the workers survey data. 91 percent of the child workers lie in the age group of

Table 5: AGE AND GENDER DISTRIBUTION OF CHILD WORKERS								
	Age and gender distribution of child workers							
Age	Boys	Girls	Total	Percentage				
9	1	1	2	1.33				
10	4	3	7	4.67				
11	4	1	5	3.33				
12	12	17	29	19.33				
13	21	19	40	26.67				
14	42	25	67	44.67				
Total	84	66	150					

Table 6: GENDER DISTRIBUTION OF WORKERS							
Feminization among child and adolescent labour*							
	Plot Worker Village Khandelwal et al (2008)						
Girl Children	51.5	44.0	53.0	47.2			
Adolescent girls	45.9	32.3	32.7	43.7			
Overall women	47.1	37.4	39.6	42.4			

* Note: The percentages are with respect to the given category, for instance, child girls' percentage with respect to total child workers.

^{7.}DRMU is an organization of seasonal tribal migrants from South Rajasthan promoted by Prayas Centre for Labour Research and Action http://www.clra.in/program-portfolio

^{8.}NCPCR is a commission set up by Government of India in 2007 under the Child Rights Act, 2005. http://ncpcr.gov.in

12-14 years. The three estimates in Table 6 show that the percentage of girls working as child labour as 51.5 percent, 44 percent, and 53 percent in the plot, worker and village surveys respectively.

The table compares the percentages with the earlier report (Khandelwal et al. 2008). The worker and village level data do show decline in the feminization of labour. This can be interpreted as actual reduction in the employment of women in hybrid cottonseed work. However we have no proof to back this claim. We suspect that it is possible that as our investigators were all men they might have found it easier to interact with male labourers. Also, given that in India females are supposed to do the household work, they might not have been as easily available for filling the questionnaires as men. Venkateswarlu's (2015) data suggests that 56.5 percent girls among total children. Similarly UNICEF (2014) also mentions preference for girls in the hybrid cottonseed work. Furthermore in our

interactions with organizers, mets and farmers, they suggested that men and women are roughly equal in number. Thus, the decline in percentage should be interpreted cautiously as representative of our sample rather than an overall trend.

COMPANIES

Table 7 shows the companies for whom the farmer produces the Bt hybrid cottonseed and the associated incidence of child and adolescent labour. From the data Bioseed and Ajeet seeds share the majority of the farms employing child labour.

	Table 7: COMPANY FARMS AND CHILD/ADOLESCENT LABOUR								
		(Child		Adolescent				
	Company Name	Male	Female	Total	Percentage	Male	Female	Total	Percentage
6	Yash Agrotech	0	0	0	0.0	2	0	2	1.3
	Vikram	0	0	0	0.0	0	0	0	0.0
O	Tulsi and Doctor	0	0	0	0.0	3	4	7	4.5
	Savan	0	0	0	0.0	0	0	0	0.0
cottonseed production	Nuziveedu	0	0	0	0.0	0	0	0	0.0
ij	Narmada	0	0	0	0.0	0	0	0	0.0
7	Myico	2	1	3	3.1	0	0	0	0.0
5	Monsanto	0	0	0	0.0	4	3	7	4.5
2	JK	0	0	0	0.0	3	1	4	2.5
	J.K.C.H.1297	0	0	0	0.0	3	3	6	3.8
Pe	Gold 813	1	3	4	4.1	5	1	6	3.8
P	Gold 811	1	2	3	3.1	0	0	0	0.0
N	F/S Cotton K 3190	0	0	0	0.0	2	2	4	2.5
5	F/S Cotton 055	0	0	0	0.0	0	0	0	0.0
t	Doctor	0	0	0	0.0	0	0	0	0.0
ŭ	Bioseed	9	7	16	16.5	1	1	2	1.3
37	Ambika 710	0	0	0	0.0	0	0	0	0.0
in BT	Ajeet Seeds	31	30	61	62.9	28	26	54	34.4
÷	Ajeet and Bioseed	0	0	0	0.0	6	4	10	6.4
E	Not mentioned	3	7	10	10.3	28	27	55	35.0
abo	Total	47	50	97	100	85	72	157	100



Table 8: EDUCATION LEVELS Educational Status Children Male Female Total Percentage Illiterate 30.95 40.91 35.33 **Below Primary** 38.10 28.79 34.00 28.57 26.67 Primary 24.24 Secondary 4.00 2.38 6.06 **Adolescents** Male Female **Total Percentage** Illiterate 30.32 36.49 32.31 **Below Primary** 20.65 16.22 19.21 Primary 36.13 31.08 34.50 10.04 Secondary 9.03 12.16 3.23 3.06 **Above Secondary** 2.70 0.87 No Response

Table 9: EDUCATIONAL STATUS OF CHILD AND ADOLESCENT WORK Child workers Adolescent workers Female Male Female Male Illiterate, primary or below 93.9 97.6 83.8 87.1

Table 10: REASONS FOR SCHOOL DROPOUTS					
Reasons	Children	Adolescents			
Domestic work	20.67	15.72			
Fail	12.00	17.90			
To earn money	1.33	4.37			
Beatings at school	2.67	1.31			
Did not feel good	3.33	8.30			
Expense		2.62			
Farming work		1.31			
More than one reason	36.00	21.83			
Not mentioned	18.67	21.40			
Other	5.33	5.24			

EDUCATION LEVELS

The education levels of the workers are dismal. As we see in Table 8, 35.3 percent children and 32.3 percent adolescent workers reported not having attended any schooling at all. Whereas 34 percent children and 19.2 percent adolescents reported studying/having studied till 'below primary' level.

Taking illiterate, below primary and primary together, the percentage of children and adolescents in this category is shown in Table 9.



Relationships

Farmers, Agents, Organizers, & Seed Companies





THE ROLE OF ORGANIZERS IN COTTONSEED PRODUCTION

The technology provider partners with seed manufacturing companies to incorporate the Bt technology into cottonseeds. Seed companies produce their plant varieties by backcrossing and produce the Bt male and female variants. A 450 gm packet of foundation seed contains either male or female variant as Bt. The production of Bt cottonseed takes place when farmers sow these foundation seeds and manually pollinate the female flower with the male right before the seeding stage. Seed companies reach farmers through organizers located near the production areas. Organizers get chosen based on their capacity to organize cottonseed production, often called programs allotted by the seed company. Organizers provide their acreage plan to the seed company, which is an estimate of cottonseed growing area. Based on the acreage plan of different organizers, the company foresees whether it can meet its target production.

Based on the organizers' estimate, the company gives foundation seeds to the organizer. A thumb rule of 450 gm packet to be sowed in an acre is followed. The organizer then involves seed agents in different pockets of production areas. Several middlemen, such as the organizer and agents get added in the chain between the company and the farmer, while non-tribal farmers with large plots (>5 acres) take foundation seeds directly from the organizer. The organizer compiles a plot-wise farmer list with the help of seed agents and sends it to the seed company for keeping a track of production.

The organizers also conduct and arrange self and company inspections. The seed companies generally conduct 3 inspections. In addition to these, organizers conduct their own checks from time to time. Organizers deny the usage of child labour as a regular labour activity and clarify that children working on cottonseed plots are from the farmer's family and lending help in the farm activities outside their school hours. Government

intervention has also increased over the years. Organizers say that the incidence of child labour five-to-six years back was almost 30 percent and has now come down to two-to-five percent. Farmers and organizers are especially sensitive to this issue and our questions (mostly indirect) were either dodged or answered negatively, and at times people would cut the interview short and refuse to cooperate further to continue with the interview.

Organizers tend to face problems if the seed companies don't make timely payments, would withhold or deny payments. Labour is another problem which organizers face in carrying out the ginning activities in a timely manner, which usually takes place in the first half of December.

RELATION BETWEEN ORGANIZERS AND FARMERS

In Gujarat, organizers are generally from the Patel community, located in non-tribal areas like Idar, Diyodar, and so on. With the shift of cottonseed growing area to the tribal belts, organizers now have to involve more tribal farmers, and apparently, more seed agents also come into the picture. Organizers provide foundation seeds, fertilizers, pesticides, and all monetary payments including loans to farmers through these agents only. So with the chain lengthening, the farmer has to shell out more from his/her pocket. There is no formal contract between the organizer and the agent, or between agents and the farmer. Organizers generally charge seven percent monthly interest on loans, as well as variable rates for fertilizers, pesticides, insecticides, and other cropping inputs given to farmers if needed.

After seed balls are ready, the farmer brings the *kapas* (cottonseeds along with the lint) for ginning at mills. Most of the organizers have their cottonseed ginning mills with delinting facilities, those who don't have to arrange it through independent ginners. Seeds should meet minimum quality parameters otherwise payments are denied

by the company, and such farmers' lots returned to the organizer. The rejected lot remains suitable only for the lint extracted at the beginning of the ginning process, and the clean seed just goes as animal fodder. Only after the company pays the organizer based on the quality-passed seeds, the organizer initiates payment for the farmer. The organizer



deducts payment for their services and calculates the amount payable to the farmers. After this, the agents get involved, and the amount passes through hands and deductions to finally reach the farmer.

Some organizers don't keep their promises made to farmers about crop-advising, accounting for much of the seed failures. Organizers rarely give farmers exact details of expenditure incurred during ginning but incorporate these while calculating the final payable amount to the farmer. Around 40 percent weight deduction happens from raw seeds in ginning, but the farmer is often unaware of the details. The farmer has to settle for whatever the organizer provides him.

The farmers also cannot question the seed appraisal results provided by the company based on tests carried out at company locations. The payable amount depends on these results only. Further, it takes more than six months from the date of receiving the test results by the organizer for the farmer to obtain the final payment.

In tribal zones, farmers vehemently oppose payment deductions if their seeds have failed the company tests. Tribal farmers often gang up to threaten the local agents. Some organizers also reported that tribal farmers catch their personnel going for field visits and hold them for ransom. To mitigate such dangers, local agents would typically withhold the actual seed appraisal results, and equitably distribute the corpus, thus, underpaying most of the farmers to accommodate few of those whose products have failed the tests. Often, local agents had to flee from their villages when organizers had denied full payment due to any reason.

Tribal farmers hardly have any cash at their disposal. Loans, fertilizers, pesticides, and all other cropping inputs taken from the organizer are taken into account during the final settlement of payment. It has become a sort of practice that farmers take foundation seeds, fertilizers, and loans every season despite the risk of getting overcharged than the market rate. However, regardless of tribal or nontribal, our study tells that more than 63 percent of farmers take advance from organizers. Tribal farmers took advance in the range of Rs 500-20,000 (7.66-306.58 USD), while non-tribal farmers took in the range of Rs 50,000-1,00,000 (766.45-1532.89 USD). Non-tribal farmers say they need loans mainly to provide advance labour payments to mets, which is often a substantial amount, given the number of labourers required. Only after the farmer pays advance to met they get labour without which cottonseed cultivation is not possible in their big plots. Tribal farmers, on the other hand, take loans mainly to fulfil family needs. The organizer charges monthly interest on loans. Our study indicates that for tribal farmers this varies between one to three percent, while for non-tribal farmers it stays near to two percent. Remarkably, 15 percent of tribal farmers studied were unaware of the interest rate and said that organizers and/or agents settle the same during final calculations. This was not the case with non-tribal farmers who knew exactly how much interest they were being charged. It could be either due to the higher amount of loan taken by them or simply due to their awareness level. Non-tribal farmers also said that fertilizer costs were borne by them, which were either market procured or purchased from organizers. Tribal farmers, on the other hand, depended on organizers and agents for fertilizers and pesticides, with 80 percent of them reporting that fertilizers were provided to them through agents and/or organizers, obviously the cost of which were to be considered during final calculations.

RELATION BETWEEN FARMERS AND SEED COMPANIES

Although the organizer is a crucial link between the seed company and the farmer, we included some questions in our survey that could give us a glimpse of the relationship between farmers and seed companies. Barring few farmers in the nontribal regions who grew cottonseeds for multiple seed companies, most of the farmers raised it for a single company only. However, a significant proportion of tribal farmers (50 percent) could not tell us the name of the seed company for which they were growing cottonseeds. It shows that farmers highly depend on organizers and seed agents for cottonseed cultivation. At the same time, we did not find the prevalence of any written contract between the company and farmer (as noted in Khandelwal et al. 2008) for 40 percent of farmers. However, based on our survey of cottonseed plots as well as interviews with organizers, we could draw various aspects of this relationship.

PROCUREMENT RATES AND SELLING PRICE OF SEEDS

Farmers have little say over both the procurement rates and selling price of cottonseeds. To enhance their profitability, farmers can only take control of the expenditure they incur in growing cottonseed, a major one being the cost incurred on labour. This point was indicated in the previous report (Khandelwal et al. 2008) as one of the reasons behind the





overuse of child labour. Over the years, child labour has become a sensitive issue and presently is not as rampant as it was six-to-seven years back. Nevertheless, the fact that farmers can raise their profitability only through the reduction of labour costs now reflects in the shift of cottonseed production from non-tribal to tribal zones. Though child labour has diminished in the form of waged work in non-tribal plots, it has undoubtedly multiplied under the shadow of family labour in tribal plots, which also becomes evident from our study done on tribal plots.

Non-tribal farmers purchased foundation seeds in the price range of Rs 1000-1500 (15.33-22.99 USD) per packet depending on the variety. Tribal farmers, on the other hand, bought foundation seeds in the price range of Rs. 1000-2000 (15.33-30.66 USD) per packet; 73 percent of them purchased it in the price range of Rs. 1800-2000 (27.59-30.66 USD), while only 10 percent of them bought it in the price range available to non-tribal farmers. The involvement of several seed agents between organizer and farmer causes hike in prices of foundation seeds charged to the remote tribal farmer. It indicates that non-tribal farmers' proximity to the organizer gives them an edge over remote tribal farmers with respect to profitability in growing Bt cottonseed.

Further, regardless of tribal or non-tribal farmers, the data also gives us a glimpse of the supernormal profits churned by seed companies. Bt cottonseed prices can well go up to Rs 800 (12.26 USD) per 450 gm packet in the hybrid cottonseed market as set by the government. At the same time, our data tells that companies purchase these seeds from farmers at the



rate of Rs 400-450 (6.13-6.90 USD) per kg.

It is important to note that 30 percent of tribal farmers studied were unaware of the foundation seed prices and said it gets accounted during the final settlement. In contrast, all non-tribal farmers were aware of the foundation seed prices. This dimension adds to our understanding of how cottonseed production in non-tribal regions differ from tribal regions.

SEED AGENTS AND THEIR COMMISSION

In the case of non-tribal farmers, many take foundation seeds directly from the organizer, and as reported in Khandelwal et al. (2008), the agent is often the organizer in their case. Thus, seed agents as distinctive players in the chain between the organizer and the farmer are more vivid in the case of tribal farmers. For non-tribal farmers, seed agents (i.e., organizers) have other ways of charging their commissions.

More than 73 percent of tribal farmers studied were unable to tell us about seed agents' commission despite knowing that they exist between them and organizers. In tribal areas, seed agents derive their commission by ways of overcharging products sold to the farmer, whether it is foundation seeds or pesticides. Tribal farmers are unaware of seed agents' commission because they rarely pay them upfront. Just as organizers deduct for their services, seeds agents also ensure that their commission is deducted before the organizer calculates the final payable amount to the farmer.

INSPECTIONS AND CHECKS OF COTTONSEED PLOTS

Non-tribal farmers confirmed about field inspections, which were done mainly by company officials. After the organizer shares the list of farmers

with the company, a field assistant (company staff) performs the 1st inspection of farmer's plot during the month of July. The 2nd inspection is done to check the manual cross-pollination activity during the month of September. Finally, in the 3rd inspection, an estimation of the productivity is done in which company officials visit farmers' plots and count the number of cottonseed balls from sample plants to get an estimate of the plots' production. A number of tribal farmers also reported about inspection being done by organizers and agents. Some organizers have to say that MNCs and reputed national seed companies have clear and strict policies, especially against the usage of child labour in cottonseed plots. The organizers bear this responsibility as well. Organizers say that regular checks conducted by company officials of these companies have ensured that farmers refrain from using child labour. For instance, Bayer (an MNC) performs farm inspections

Table 11: FIELD INSPECTION	S
Field inspection in tribal plots	No. of tribal farmers
Agents	13
Agents, Company officials	17
Company officials	55
Organizers	3
Organizers	3
Organizers, Agents	1
Organizers, Agents, Company Officials	1
Total	93

especially during the cross-pollination season to check whether farmers are using child labour. Farmers also deny the usage of child labour and are aware that reputed seed companies, especially the MNCs and big Indian companies, have stringent measures against defaulters. Some farmers even said that their village Mukhiya (village-level head) has taken up the responsibility to ensure that no child is employed as waged labour in cottonseed plots. Frequent inspections by governmental agencies and proactive stance of some child-focused NGOs have raised the awareness among farmers, and now they are extremely cautious about this issue.

In the case of tribal farmers, although inspections are prevalent, we find lesser intrusions of seed

companies. However, in their case, this void is filled up by organizers and agents. The following table clarifies the presence of agents and organizers in addition to company officials in inspecting tribal farmers' plots. As per our data, the intrusion of company officials dropped to 80 percent in tribal plots compared to 100 percent in non-tribal plots, but interestingly the role of the organizers and agents grew to 40 percent in tribal plots compared to almost nil in non-tribal plots. In case of tribal farmers, agents and organizers also play a significant role in supervision of crops.

However, a decline in company intrusion indirectly means lessened pressure on farmers to refrain from using child labour. For tribal plots, even the organizers do not deny the presence of child labour but claim that it is not a regular activity. They told us that children working on cottonseed plots are from the farmer's family and lending help in the farm activities outside of their school hours.

LABOUR RECRUITMENT -ROLE OF METS

Farmers approach mets three to four months before manual cross-pollination starts, to convey their labour requirements, irrespective of child or adult, and extend advance compensation for luring the labour to migrate for work. Mets arrange for labour and bring them to work on cottonseed plots at costs borne by the farmer, after recruiting them against advance payments normally varying between Rs 500-2000 (7.66-30.66 USD) per worker. Mets are veteran cottonseed workers who after years of labouring gradually move up the ladder to work as a labour contractor. Apparently, their local contacts, networks and reach allow them to arrange for the said labour force.

Farmers pay commission to mets, the going rate being Rs 30 (0.46 USD) per worker per day. After delivering the workers to the farmer, the met either stays along with them in the farmer-provided accommodation or goes away. Mets taking child labour have a responsibility of ensuring that farmers do not short-change and pay credibly for

the entire period, which has to include sick days when the worker could not work, or worked less. If the worker flees or leaves work in between to return home, only then can the farmer deny paying wages for the days not worked. Mets said that they keep a record of the person-days of each worker and accordingly check whether the farmer paid wages appropriately.

Mets staying on the plots relieve the children from the

burden of direct farmer supervision and control, as such supervision, in many cases, leads to abuses of various kinds. Our interviews with children assert that Seths (farmer) regularly beat children as a way of disciplining them to work. One of the mets agreed that Seths beat children, though not in his presence. The role of mets thus becomes crucial because apart from supervising and guiding labourers, they also ensure that Seth's work gets completed without workers bearing excessive emotional and physical toll. Mets told us that they also have the responsibility of bringing workers back home in case of serious illness and at the same time procure labour to fill such gaps. Thus, Mets act as mediators in the farmer-labour relationships, and apart from the economics of cottonseed production, upon which so many lives depend, their crucial imprints on the lifeworld of farmers and workers is undeniable.

However, in cases where mets thin out from the scene, i.e., they do not stay back on the plot, migrant workers become exposed to farmer's direct supervision and control. Where child labour is high, farmers feel less pressured to oblige to workers' concerns. Problems intensify for child labourers when young children encounter roguish farmers.





Development's forgotten children

knew I had plans to beat him up." Mets agree that though this work entails risk to children's lives, the parents have no option but to send the children to work, mainly for money to make ends meet. Abject poverty due to the absence of economic work and cultivable land compels guardians to force children out of school for this work. Nonetheless, it is undeniable that the ineffectiveness of schools fuels this young labour market to multiply. One of the mets explained, "Mostly 13-16-year-olds come to do this work. Otherwise, they remain

unemployed... adult labour will not do this work because wages are too low. Schools are dysfunctional; teachers do not care if the children are attending school or loitering around, [schools] do not provide mid-day meals, children will become vagabonds if they don't go to work ... Parents [too] think that if their children cannot study, they should at least work and earn something."

Children who migrated every year gradually built an affinity for this work. We found support in children's interviews. Regular migrants willingly take up this work every year without parental pressure which was more in the case of new entrants. As more and more adult workers decline to do this work, the pressure ultimately comes upon children, who could be initially forced to take up this work, but with time they see it as easy income. "Aaram ka kaam" (easy job) as asserted by a boy who has now been migrating for more than five years for this work. One of the mets confirmed this fact by saying,

"Nowadays the children are so smart; they directly contact me for work. Many of them have mobile phones now. As they get accustomed to this work, they also get clever, stronger, and come to

Noting that in addition to physical and verbal abuses, mets said that sexual harassment of young child labourers continues despite stringent repercussions for the farmer if caught red-handed, which has nevertheless helped to put a check on such misdeeds. These cases rarely reach the media as these unscrupulous farmers, though less in number, are quite adept in keeping such issues hidden, and in the event of exposure they can tackle both the authorities and the victim's family through varied means. Mets also complained about some farmers' non-compliance to pay entire wages on time and their tendency to show opportunistic behaviour once work completes leading to some, if not all farmers' bad reputation in the met community. Experienced mets, however, have their ways to tackle such nuisances. One of the met who has been working as one for the last 25 years said:

"I prefer going to [those] Seths [farmers] who behave well, provide Khaat (cot) and other living essentials, pay timely wages and provide proper food...once a farmer delayed wage payment by two months, next year I took an advance of R. 50,000 (766.45 USD) from him and did not send him any labour, instead, I told him to come to Rajasthan if he wants his money back. He never turned up as he know that although they are uneducated, they can still learn ways to earn their livelihood. Back at home, they would be starving, but when they go to work, they get food regularly, and eventually some even gain weight during their stay."

Interviewed mets said that they take 20-50 labourers every year for this work, while also affirming that migration volumes have reduced in the recent years. Especially the people in source areas of Rajasthan, i.e., Udaipur, Dungarpur, Simmalwada, and so on, have been growing cottonseed in their home plots, especially since the last five-to-seven years and prefer to stay at home than migrate. The availability of other better-paying options is another factor, especially for adult workers. Consequently, the absence of sufficient labour has compelled farmers in Gujarat to either reduce their cottonseed acreage or shift to other crops. However, this does not mean that the total cottonseed production is declining in the state because farming is now largely shifting to tribal plots. We get support for this in data collected from organizers and farmers. Thus, the shift of cottonseed farming from non-tribal to tribal plots indicates among others, the thinning out of mets from the whole cottonseed chain, whose prime responsibility, at least until now, was to bring migrant labour to cottonseed plots in Gujarat for one-to-two months for performing the activity of manual cross-pollination.

Regional differences in sourcing labour supply

are also growing. One of the mets confirmed that labour supply from Dungarpur district has reduced in recent years owing to the above reason, accompanied by an inclination to send children to school. Firstly, villages closer to towns now send less migrant labour for cottonseed work because other work offering higher wages are available to adults in the nearby towns and cities. Secondly, the employment of child labour is also

picking up in the tribal plots, although for a smaller period (of 15-20 days) but on higher wages (Rs 200 (3.07 USD)) compared to migrant cottonseed work which takes one-to-two months and pays Rs 150 (2.30 USD) per day. However, tribal farmers do not require mets for this labour as they mostly arrange it on their own. This observation again reifies the diminishing role of mets in cottonseed production, which might further lessen in days to come.

All the children reported working for at least eight hours a day. Table 12 shows the distribution of the hours of work per day reported by the children. Data shows that approximately 85 percent of the children worked for 10 hours per day, while 11 percent reported working for eight hours daily. The distribution is consistent among male and female children.

EMPLOYMENT CONDITIONS -WORKING HOURS

Data depicted in Table 13 suggests that most children work for at least 30-60 days. As shown in Table 13, 62.12 percent children reported working for 30-60 days on hybrid cottonseed farms, while 12 percent reported working for more than two months. Interviews with children revealed that

Table 12: DAILY WORK HOURS REPORTED BY CHILDREN					
Hours of work	Male	Female	Total percentage		
8	9.52	13.64	11.33		
9	1.19	1.52	1.33		
10	88.10	80.30	84.67		
11	1.19	3.03	2.00		
12	0.00	1.52	0.67		

Table 13: NUMBER OF WORKDAYS REPORTED BY CHILDREN						
No. of days worked	Total children	Male	Female			
Less than 30	25.33	25.00	26.56			
30 - 60	62.67	63.10	62.12			
60 and above	12.00	11.90	12.12			



owners assign some of the children other tasks when the pollination work is done. As one girl mentioned in the interview, she had to spend more than six months on the owner's farm to get her payment.

LIVING AND WORKING CONDITIONS

Workers stay in accommodations inside the farms. As can be seen in Table 14, 54.3 percent of the workers reported that the accommodation was a temporary building with ceiling and walls. Only 13.5 percent workers reported

staying in pukka houses, while 31.3 percent stayed in open houses. The workers reported that anywhere between one to 30 people stay together in these accommodations. While 58 percent workers reported sharing the accommodation with less than nine people, 35.2 percent workers reported staying with 10-19 people, while the rest reported that they shared accommodation with 20 -30 people (Table 15).

Data in Table 16 reveals that in most cases there is no separate living arrangement for males and females. Almost 70 percent of the workers reported that males and females have to stay together in the same room. 36.4 percent reported that no medical facility was available to them and 48.7 percent workers reported a lack of proper sanitation facility available in the living spaces on the farms. In our interviews, most of the children reported defecating and bathing in the open.

Table 14: TYPE OF ACCOMMODATION REPORTED BY ALL WORKERS			
Accommodation	All workers		
	No. of workers	Percentage	
Open	178	31.28	
Own house	1	0.18	
Pukka house	77	13.53	
Temporary buildings with walls/ceiling	309	54.31	

Table 15: NUMBER OF PEOPLE STAYING TOGETHER				
Number of people	Worker responses	Percentage		
staying together				
0 - 9	329	57.82		
10 -19	200	35.15		
20 - 30	40	7.03		

Table 16: ACCOMMODATION FACILITIES				
Separate	No. of			
Accommodation	Workers	Percentage		
Yes	158	27.77		
No	398	69.95		
No response	13	2.28		

Table 17: MEDICAL FACILITIES			
	No. of		
Medical Facilities	workers	Percentage	
Yes	357	62.74	
No	207	36.38	
No Response	5	0.88	

Table 18: SANITATION FACILITIES				
Sanitiation Facilities	No. of workers	Percentage		
Yes	287	50.44		
No	277	48.68		
No Response	5	0.88		

Table 19 details the distribution of wages among different segment of workers. The wages reported by the workers ranged from Rs 120-300 (1.84-4.60 USD) per day. However, 82 percent of the total workers

WAGES

reported wages below Rs 150 (2.30 USD) per day. The gender-wise distribution shows the percentage of men and women receiving wages below Rs 150 (2.30 USD) as 79.2 percent and 86.9 percent, respectively. The highest wages reported by men and women were Rs 300 (4.60 USD) and Rs 230 (3.53 USD) respectively. Among children, 96 percent reported receiving wages below Rs 150 (2.30 USD) (96.4 percent and 95.5 percent as reported by boys and girls respectively). The minimum wage in Gujarat during the year 2017 was Rs 178 per day while the same for Rajasthan was Rs 212 per day for an eight-hour work day. Thus it is clear that a huge majority of workers did not get minimum wages. This is attributed to the historically lower bargaining power of tribal workforce. In case of children therefore, the bargaining power is further worsened.

LABOUR RATIONALES

Although cottonseed production in tribal areas is dependent on family labour, the presence of waged labour cannot be entirely ruled out. Our interviews with children working as local child labour in tribal plots of Dungarpur affirm that apart from migrating, children are increasingly preferred by tribal farmers as an additional labour impetus for 20-25 days during which flowering is vigorous. Workers and their families prefer local labouring because per day wages turn out to be more than migrant wage due to the absence of mets. Local labouring could also go alongside schooling as children told they work only on holidays. So even if the total days of waged labour is less than migrant work, tribal regions where cottonseed production has immensely increased over the years, which means that labour opportunities have also grown,

Table 19: WAGE DISTRIBUTION							
	Wages (INR/		Percent-		Percent-		
	USD)	Male	age	Female	age	Total	Percentage
	120-150/ (1.84-2.30)	282	79.2	185	86.9	467	82.1
Overall	151-200/ (2.31-3.07)	50	14	164	9.9	71	12.5
	201-300/ (3.08-4.60)	9	2.5	1	0.5	10	1.8
	Not reported	15	4.2	6	2.8	21	3.7
	120-150	81	96.4	63	95.5	144	96
Child Workers	151-200	3	3.6	3	4.6	6	4
	201-300	0	0	0	0	0	0
	Not reported	0	0	0	0	0	0
	120-150	110	71	61	82.4	171	74.7
Adolescent	151-200	37	23.9	11	14.9	48	20.9
workers	201-300	1	0.6	0	0	1	0.4
	Not reported	7	4.5	2	2.7	9	3.9
	120-150	91	77.8	61	83.6	152	80
	151-200	10	8.6	7	9.6	17	8.9
Adult	201-300	8	6.8	1	1.4	9	4.8
Workers	Not reported	8	6.8	4	5.5	12	6.3

Development's forgotten children

prefer local in place of migrant labouring. However, when we visited villages in Phalasiya in Udaipur district, where cottonseed cultivation has risen but is not as much as Dungarpur, we found that till date there is a great number of people who migrate to Gujarat every year for this work.

Manual cross-pollination work, whether local or migrant, is taken up primarily due to economic constraints. Some children said they were sent every year by their parents when met came to ask for work irrespective of how the farmers treated them. Others said they self-opt to do the job every year because they need to earn money for their clothing, provide support to the family, and do not get any other work at home. The seasoned children called it a light job (aaram ka kaam) compared to other manual labour that takes more physical strength. When delved further, we learned that this work, especially among migrants, incorporates mute acceptance of both physical and mental exertion by the worker. Wages were kept unpaid until the completion of work, and any resistance such as leaving the work site, being absent or not completing the allotted task led to deductions or complete elimination from the farmer's list of workers who needed to be paid.

Children who were local added that by doing this work, they could arrange for school fee, use

their holidays to earn and provide support to the family. Local child labour harped on the importance of education, citing it as the reason for their unwillingness to migrate for work. The opportunity



to earn in the vicinity of their homes proved advantageous as they could utilize their school holidays (20-25 days during Diwali festival) to do this work, although till what extent they were able to attended school regularly is doubtful. Remarkably, some children stated that they liked going to school because it was physically less taxing than going to work. Local child labour also said that they liked doing the work with friends.

In light of the above context, workers tend to neglect their health and keep succumbing to work demands. For farmers, workers are a cost centre. Either they continually tend to extract maximum

HEALTH

worker-effort or look for opportunities to reduce their debt burden. Thus, workers' health becomes the last priority for both farmers and workers themselves. More than 37 percent workers in our study reported the absence of medical aid near the plots where they went for work. For the rest, if workers took medical aid, it was provided by

farmers only to be deducted from their wages. For local labour, the farmer is further relaxed from this responsibility. Only 50 percent of the workers studied had washing and/or toilet facilities at their work sites. Our interviews with migrant child labour reveal that workers defecated in open fields and in water bodies like lakes and streams. Some even said they had to

walk for 20 minutes in the dark, hours before sunrise in order to answer nature's call. They had to start working early in the morning for preparation of male flower which was then needed to be used for manually pollinating the tagged female flowers before noon. Barring few, most of them bathed in the open, near water tanks constructed on the farmers' plot. Although adults maintained separate male and female timings for bathing and washing, children often bathed together. Children also told us about feeling pain in their fingers for which

medicine was to be self-arranged. They also had to endure long hours of work under the sun, walk over mud in the field, do tedious work and were pressured to speed-up work. Unlike migrant labour, local labour could avoid going to work or leave the work site when sick.

Workers stay in sheds provided by farmers, often situated on or near the plots. Workers cook their meals, twice a day. Usually, the farmer

RELATION BETWEEN FARMERS AND WORKERS

provides for vegetables and cooking oil, sometimes

for cereals too, but only after instructing the local stores to dispense limited quantities of raw materials. After completion of work, the farmer takes all these costs into account, charges interests on the advance payments made, and calculates the sum due. For local labour,



farmer provides lunch, which some children said, was provided less than what they needed every day. Some miscreant farmers who would initially make tall promises resorted to quarrelling and torturous treatment of workers in the last five-to-six days of the season, forcing most young workers to flee without taking their balance wages.

Prima facie, our survey painted an optimistic picture of just three percent of workers saying their wages were deducted, just due to two reasons. One, the met had taken more advance and two, the



farmer did not pay the full wage. To get a better picture, we calculated the total wage promised for each worker, i.e., total payment as per the number of days worked multiplied with per day wages, added with the advance with interest (assuming 10 percent), and subtracted deductions if any. We compared this promised wage with the actual payment, and culled out cases where the actual payment was less than the total payment promised. 311 out of 425 workers faced payment deductions, out of which for 285 workers received wages that were 20 percent less

than the promised wage. The data indicates the large -scale prevalence of wage deductions and payment declinations in this occupation.

Farmers, on the other hand, reported that they have to pay full wages to labour even if the labourers leave in between and leave the work unfinished. They also said that over the years, migrant labourers have learnt the art of growing cottonseed in their farms, which has now made them capable to think beyond the staple crops they usually grow in their home plots

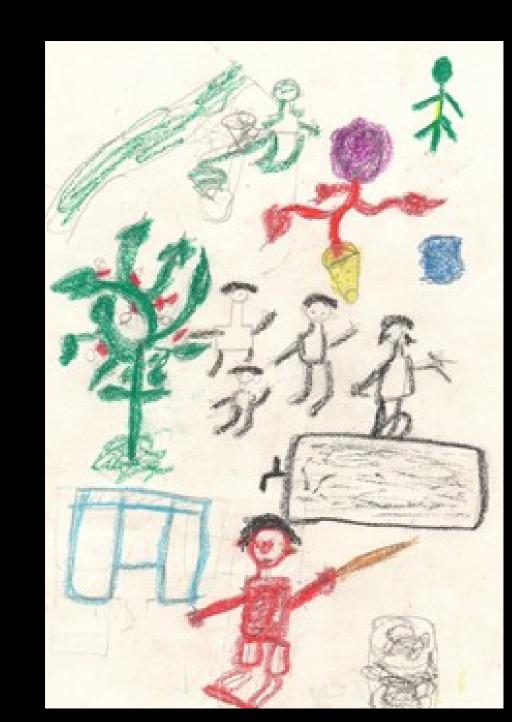


Figure 1: A child's drawing-Seth with a stick in hand for beating children

and is the reason for them being much better-off than before.

ABUSE AT WORK

Children said they were beaten up for not working correctly, accidentally not being able to pollinate or breaking flowers. One girl recalled:

"... [T]he Seth beat me because I had removed couple of tags together and then got confused which one is yet to be



Figure 2: Basantilal's Diwali

pollinated so I missed the flower. The Seth checked and beat me for missing one of the flowers. I felt angry and sad but with whom could I have shared this there? After some time, I resumed the work. Otherwise my day's wages would have been deducted."

Similarly, another girl narrated an incident where she saw one of boy from her village being beaten up by the farmer. The child ran away from the field back to his village after the incident. The children said they would often hide in the cotton field to escape beatings. Two of the girls narrated:

"He (Seth) asked us to take the water container into the field and drink there rather than coming to well. But we did not take the water container. Then we were sitting and eating baer (a fruit) on the side of the field. He came from behind and threw the container towards us. We ran away. We hid in the cotton fields till midnight (from 3pm to 12am). The workers in the neighbouring field saw us and told our met that we were hiding and then he (met) came and took us back. We did not have any food that night, then woke up early in the morning to make food."

The children bear the beating due to the fear of losing their wages as one child mentioned

"... [W]hen Seth beats me, I feel like going back home, but if I leave at my discretion Seth would not pay me my wages".

Figure 2 illustrates Basantilal's drawing. We had asked the children to draw their work-related experiences. Whereas everyone drew pictures about cottonseed farms, Basantilal's drawing depicted the

THE CASE OF BASANTILAL

festival of Diwali, which prompted us to find out the reason for this strange and distinct outcome.

Basantilal belongs to Phalasiya (Udaipur district), aged below 14 years, who recently dropped out from school due to family pressure. His parents had sent him to work on a cottonseed plot through a met on a daily wage of Rs 130 (1.99 USD) little aware of what their boy had to face there. After manual cross-pollination activity was over, the farmer offered Basantilal and a few other teenage workers another work at his construction site at a daily wage of Rs 200 (3.07 USD). The jump of Rs 70 (1.08 USD) was more than what these children could expect, while their negligible awareness about the severity of construction work was exploited by the farmer. The farmer told that their entire wages, i.e., wages of cottonseed as well as construction work,

will be paid altogether when they would decide to leave and go back home. The farmer shifted the children to his residential premise which was under construction, accommodated them in a veranda and instructed them to work alongside adult construction workers. After few days, the children realized that unlike the work in the cottonseed farm, construction work was severely arduous for their age. They expressed their intent to discontinue working, but the farmer paid no heed to their requests while also declared that those who would not be paid a single penny, i.e., not even the wages due from their cottonseed work. The children including Basantilal, however, did not stop pleading the farmer, at least once per day in the hope that the farmer would oblige, but the farmer ruthlessly turned down their requests. With their wages withheld they could not escape while the backbreaking work became unbearable each passing day. As Diwali approached, the children's plea intensified as they urged to return home for the festival, while the farmer hardly budged knowing that the children would never leave without taking their wages. Eventually, Basantilal and other children, unable to break free from the farmer's grip, had no choice but to spend Diwali away from home. Meanwhile, Basantilal's family contacted the met and complained about their missing child. The met then came searching for the children and approached the farmer, and it was only then that Basantilal could return home. However, the farmer did not pay his pending wages.

For children like Basantilal this was not just an experience that could be forgotten easily but one that they would take ages to get over. When Basantilal heeded to our request of drawing a sketch of his cottonseed work experience, what we found on his drawing sheet were the images of diya (clay lamp), candles, flower, and the word Dipawali' (Diwali). It seemed a little odd in the first glance but when we dig deeper we realize that the picture unveils his agony of being stranded away from home. He was helpless before the farmer who had seized his wages and with each passing day he kept adding interest to that wage which made it increasingly difficult for him to escape.

Most of the children mentioned about missing their homes. The children mentioned about the negative experiences due to work in muddy farms, having to wake up too early in the morning (between four and five am), working in the

WORK ENVIRONMENT EXPERIENCES OF CHILDREN

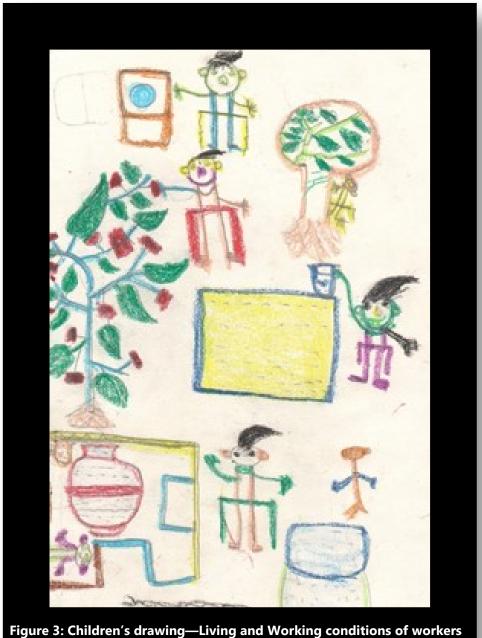
scorching sunlight, pain in the fingers, living in constant fear, etc. The children who planned to go to work in the fields again mentioned reasons such as getting to eat food, buying clothes and a general lack of money. Most of the children are recruited by the mets and asked by their parents to work and earn money. They shared that they feel lonely but can't share these feelings with anyone. The children narrated experiences of asking the employers to pay them and let them go but such requests were declined. Some of the children chose to run away from the fields. In most of these cases they were not paid for

he work they had done till then. The children mentioned that they were apprehensive of leaving due to the fear of not being paid the pending wages. One girl narrated one such incident:

"...there were a couple of boys who were asking 'Seth' to give them money (pay their wages), so that they could leave, but he did not pay them anything. The boys called their parents to tell them that the seth was not paying them money. Their parents phone-called the seth asking him why he was not paying them. The seth in turn beat these boys for calling home and claimed that he would have paid after 5 days. However, he did not pay them".

These children had completed the hybrid cottonseed work and were asked to do other work for the 'eth. The girl who narrated this incident had to remain on the farm for about seven months before she was paid her wages.

The children described their daily schedules. They would wake up at around four to five am, working on the fields till the meal break at 12 pm, and then going back to working till six pm. After six pm they would start cooking their dinner. They had



FOOD, WORK AND SHELTER

to cook their own meals. They would defecate and bath in the open, as there were no latrines and washrooms. Some of the drawings showed them going to defecate in the open with little containers, and bathing in the open near the water tanks. Figure 3 depicts the living and working conditions

of workers at the cottonseed farms. The drawing shows children working on cottonseed plants, cooking chapathi, bathing at the tank, resting in the shed/floor and going to defecate in the open.

Part 3



Child labour in BT cottonsee

Implications & Legal provisions



IMPLICATIONS ECONOMIC INEQUITIES

Child labour is intertwined with the problem of poverty. On the one hand, the employment of children is defended based on the logic of economics. Economics suggests that poor families depend on the earnings of their children for survival. While on the other hand, this leads to the poor families being caught in the web of perpetual poverty (Saharia 2014). This limits the prospects and life chances of these children and their families to come out of the web of poverty, i.e., perpetuation of bondage and intergenerational transfer of poverty (Khandelwal et al. 2008). The workers are mostly scheduled tribes and low-caste. This leads to the caste-based division of work and reproduction of poverty. The engagement of children in hybrid cottonseed work has led to a vicious cycle of child labour and low wages. The employment of children leads to decline in wages (Venkateswarlu & Ramakrishna 2015).

EDUCATION

Cross-pollination work takes place for around two months. The education of these children is disrupted and they are more likely to drop out of schools. The dropout percentage among these child workers ranges from 60 percent (UNICEF) to 90 percent (Venkateswarlu 2007). As suggested in other data and in this study as well, the children working on these farms are more likely to dropout from schools. The children spent at least two months on the farms, which would hamper their education.

HEALTH HAZARDS

The exposure of the children to the pesticides sprayed has serious implications on the health of the children. The children are often vulnerable to snake bites on the fields as well as in the open-air sheds. They tend to live in congested and overcrowded housing without any proper sanitation and latrine facilities. The children, especially girl children, are vulnerable to sexual abuse by farm

owners, mets or fellow workers. The children live in an atmosphere of fear accompanied by verbal, physical and sexual abuse on the farms (Madhulika 2009). The harassment and violence against these children affects their psychological health and psycho-socio development (Khandelwal et al. 2008).

<u>CURBING CHILD</u> LABOUR

There have been various attempts to curb child labour in India in general and in the hybrid cottonseed industry in particular. The issue of child labour received attention in Andhra Pradesh since 1998 due to efforts by Mamidipudi Venkatarangaiya foundation (MVF). The growing attention and campaigns against child labour use in Andhra led some private companies (Nuziveedhu, Syngenta, Navbharat) to shift their base to Gujarat. This migration was also motivated by the lower production costs in Gujarat (Venkateswarlu 2004).

In Gujarat, however, the issue received attention from 2005-06 onwards due to sustained campaigns by Prayas Center for Labour Research and Action (PCLRA), Dakhsini Rajasthan Mazdoor Union (DRMU), involvement of the government and media coverage. This led to increased visibility to the problem of child labour, decline in child labour in the subsequent years as well as rehabilitation of the children trafficked to these farms.

PCLRA AND DRMU

DRMU played a crucial role in highlighting the prevalence of child labour on hybrid cottonseed farms in North Gujarat and in organizing the mets. The union worked on organizing the mets as they formed the crucial link between the farmers and workers. This led to sensitization of the mets as well as the local community about the illegality of employing child labour. The organizing of mets also helped improve the wages of the workers, which continues to be the prime driver of child labour employment in these farms. PCLRA has engaged in advocacy coalition with National Commission for Protection of Child Rights to curb child labour in these farms.

National Commission for Protection of Child Rights (NCPCR)

The National Commission for Protection of Child Rights was set up in March 2007 under the commissions of the Child Rights Act, 2005. The commission is meant to ensure the consonance of laws, programme and administrative mechanisms with the child rights as enshrined in the Constitution of India and UN convention on the Rights of the Child. The commission seeks to build public awareness about the protection of child rights, strengthen policy and legal framework, investigate complaints related to child rights violation, and do research and documentation of the child right violations.

The commission has held public courts to investigate the engagement of child labour and violations of the rights of the children in the hybrid cottonseed farms. The commission found that the children working on these farms are often subjected to physical (including sexual) and mental abuse. The commission has been conducting public gatherings, raids and inspections, along with the state government (labour commissioners) and NGOs, to keep a check on child labour in Bt cottonseed farms. The commission has conducted inspections in Gujarat in 2008 and 2011 and similarly in the source areas of Rajasthan in 2011. The inspections in 2008 were conducted in association with Dakshini Rajasthan Mazdoor Union.

NCPCR along with DRMU actively sensitized and mobilized mets and parents to curb child labour. They organized mass meetings in the villages with parents, school teachers, and local officials to raise awareness about the illegal nature of employing children in hybrid cottonseed production. The campaign was successful in signing farmers and mets against employing children. Some of the villagers that we surveyed mentioned the role of local panchayats in discouraging the engagement of child labour. However, due to scrutiny of any occurrence of child labour and the inspections of the NCPCR, after the 2007-08 campaign by DRMU has made the farmers more cautious of hiding the incidence of child labour. The farmers were so apprehensive of our visits and would thoroughly enquire about the purpose of our visit before agreeing to talk to us. We observed children

working on the farms when the organizers accompanied us.

Curbing child labour becomes difficult due to definitional variations too. ILO specifies engagement of children below 15 years of age in any work that is harmful to their health or hinders their education as child labour. It further mentions a minimum age of 18 years for any job that may jeopardize the health, safety or morals of the young person. According to UNICEF a child is involved in child labour if he or she is between five and 11 years of age, does at least one hour of economic activity, or at least 28 hours of domestic work in a week. And in case of children aged between 12 and 14, 14 hours of economic activity or at least 42 hours of economic activity and domestic work per week is considered as child labour. The Indian national laws (CLPRA 1986; Factories Act 1948) label any child below 14 years of age as 'child worker' and prohibits any employment of such children except for domestic work or artists in audio visual entertainment industry. Children in the age group of 14-18 years are prohibited to work in hazardous occupations and processes as defined in Factories Act, 1948 and CLPR Amendment Act, 2016.

LEGAL REGULATIONS AND VIOLATIONS

CHILD LABOUR (PROHIBITION AND REGULATION) ACT, 1986 & AMENDMENT, 2016

The Child Labour (Prohibition & Regulation) Act, 1986 and The Child Labour (Prohibition & Regulation) Amendment Act, 2016, prohibits the engagement of children in all occupations and prohibits engagement of adolescents in hazardous occupations and processes. The Act provides exceptions to the engagement of children where the child is working or helping his/her family or family enterprise and for a child working as an artist in audio visual entertainment industry (except



circus). However even in these exceptional cases the work has to be non-hazardous and should not affect the education of the child. The Factories Act, 1948, defines hazardous process as:

"Hazardous process means any process or activity in relation to an industry specified in the first schedule where, unless special care is taken, raw materials used therein or the intermediate or finished products, bye products, wastes or effluents thereof would: (i) cause material impairment to the health of the persons engaged in or connected therewith, or (ii) result in the pollution of the general environment" (clause cb of the Factories Act, 1948).

The amended act has however failed to restrict child and adolescent labour by restricting the number of hazardous occupations as involving mines, inflammable substances, and explosives. Thus the legislation on the one hand allows child labour in household work and on the other hand restricts the number of 'hazardous occupations', dropping cotton farms altogether from the list. This effectively will make it difficult to curb child labour in hybrid cottonseed production. Based on our study and prior studies, we note the three observations in the context of hybrid cottonseed production in Gujarat and Rajasthan:

- 1. Children working on the hybrid cottonseed farms are exposed to pesticides which are harmful for the children's health, but that is not covered under the Act.
- 2. Hybrid cottonseed production has shifted from the traditional big farms to small farms in tribal villages of North Gujarat and South

Rajasthan. The children work in their own family farms as well as in other farms in the village. This will lead to increase in domestic child labour, which according to UNICEF is highly vulnerable to abuse and is difficult to monitor. The migration of the children could earlier be inspected by the NCPCR and local polices by monitoring the vehicles in which children used to be transported. However, now that the children don't have to be transported and work on family farms they effectively can't be either monitored or protected under the law.

The Amended child labour Act allows the 3. children to work after school hours and in vacations. This provision has been criticized as it puts the onus on the children to suffer the burden and creates more pressure for children to dropout from the schools (Kritika 2015; Ruchira 2016). The engagement of children in hybrid cottonseed farms (whether their own or owned by other within or outside the state) disturbs their education, as they often have to migrate/work on the farms for at least 2-3 months. This stands in contravention to the Right of children to Free and Compulsory Education Act 2009, which is meant to ensure access to education for all children in the 6-14 age group. Most of these children often drop out from the schools. These conditions create a category of child workers, which ILO refers to as 'nowhere children', i.e., neither at school nor in the labour force.

This violates the fundamental principle of the abolition of the child labour as mentioned by ILO –

"... the principle of the effective abolition of child labour means ensuring that every girl and boy has the opportunity to develop physically and mentally to her or his full potential."

The CLPR Act further mentions the conditions binding for the adolescent work in section 7.

7(2): The period of work on each day shall be so fixed that no period shall exceed three hours and that no adolescent shall work for more than three hours before he/she has an interval for rest for at least one hour. The children often work in 5-hour shifts.

7(3): The period of work of an adolescent shall be so arranged that inclusive of his/her interval for rest it shall not be spread over more than six hours, including the time spent in waiting for work on any day. All the adolescents surveyed reported working for 8-15 hours per day.

7(4): No adolescent shall be permitted or required to work between 7 pm and 8 am. The children/adolescents start working from 5 or 6 am in the morning.

7(5): No adolescent shall be required or permitted to work overtime: The children work well beyond the 6 hours stipulated by the law. All the children and adolescents surveyed worked for more than 8 hours daily.

Sec (9) mandates the employer to inform the inspector, within a period of 30 days from the commencement of such employment, regarding the employment of adolescents, name and situation of establishment, name of the persons employed, and nature of occupation or process carried out in the establishment. The farmers and contractors don't inform the labour inspectors.

Sec (11) mandates the maintenance of register by the employers showing the details of the adolescents (name and date of birth), hours and periods of work, and nature of work. No such register is maintained either by the farmer or the contractor

Sec (13) mandates the health and safety standards for such establishments. It includes among other things cleanliness of the place of work, disposal of wastes and effluents, latrine and urinals, etc. The children stay in often over -crowded and make-shift housing without proper latrine or urinal facility.

The Delhi High court had asked NCPCR to prepare an action plan for effective implementation of the CLPR Act, 1986. The NCPCR had drafted the plan, however, the implementation was unsuccessful due to a variety of issues



highlighted by NCPCR. The commission reported the challenges for effective implementation of CLPR Act as there was rapid increase in domestic child labour and exploitation of children in society; there were age determination issues; there was a lack of awareness and the prevalence of insensitive stakeholders; there were accountability issues; an absence of centralized database related to child labour, inadequate monitoring and supervision by the concerned authorities; absence of rehabilitation mechanisms; a lack of any scientific study on child labour in the state, non-cooperation of departments like police and labour department, and, lastly, delay in release of funds to the victims due to complex processes.

INTER-STATE MIGRANT WORKMEN (REGULATION OF EMPLOYMENT AND CONDITIONS OF SERVICE) ACT, 1979

Section (e) of the act defines "inter-State migrant workman" means any person who is recruited by or through a contractor in one State under an agreement or other arrangement for employment in an establishment in another State, whether with or without the knowledge of the principal employer in relation to such establishment.

Chapter 5 of the act mentions about the facilities mandated in the law for inter-state migrant workers, which include displacement allowance, journey allowance, other facilities (regular payment,

suitable conditions of work, medical facilities, suitable accommodation, protective clothing, in case of fatal or serious injury report to specified authorities of both the states and the next of kin of the worker).

As highlighted in the earlier report Khandelwal et al., (2008) as well, these workers fulfil the criteria of migrant workers, however they are not given the facilities regulated under this law.

The Bonded Labour System (Abolition) Act, 1976

The Act was passed in the Indian parliament to abolish the practice of bonded labour. The employment of children in the hybrid cottonseed farms satisfies the definition of the bonded labour system. The Act defines bonded labour system as:

(g) "bonded labour system" means the system of forced, or partly forced, labour under which a debtor enters, or has, or is presumed to have, entered, into an agreement with the creditor to the effect that:

in consideration of an advance obtained by him or by any of his lineal ascendants or descendants (whether or not such advance is evidenced by any document) and in consideration of the interest, if any, on such advance, or;

in pursuance of any customary or social obligation, or;

in pursuance of an obligation devolving on him by succession;

for any economic consideration received by him or by any of his lineal ascendants or descendants, or;

by reason of his birth in any particular caste or community, he would—

render, by himself or through any member of his family, or any person dependent on him, labour or service to the creditor, or for the benefit of the creditor, for a specified period or for an unspecified period, either without wages or for nominal wages,

The children are often employed against the 'payments' received by the family members (iv). Bonded labour.

The children are denied any wages if they want to leave at their own discretion. Some children recalled wanting to leave especially when they were beaten but the Seth doesn't pay any wages at all in



that case for the days that they worked. Only when the work is over they get paid. Some of the children are too young to even keep a count of the number of days they worked. There were incidences where even after working for the whole period, their wages were not paid. The mets lend money to the parents in exchange for sending children to the hybrid cottonseed farms. Some of the parents take advance money. 76 percent child and 66.4 percent adolescent workers surveyed reported working against advance payments.

MINIMUM AGE CONVENTION, 1973 (NO.138):

India ratified the convention in 2017 and it will enter into force on 13 June 2018. The convention sets to regulate the minimum age allowed for the



children to engage in employment.

Article 2(1) The minimum age specified in pursuance of paragraph 1 of this Article shall not be less than the age of completion of compulsory schooling and, in any case, shall not be less than 15 years: The workers in the hybrid cottonseed production were less than 15 years of age. Some of the children were as young as 5-6 years of age. 40% of the surveyed workers were below the age of 15 years.

Article 3(1) The minimum age for admission to any type of employment or work which by its nature or the circumstances in which it is carried out is likely to jeopardize the health, safety or morals of young persons shall not be less than 18 years: As discussed above the hybrid cottonseed work exposes children to pesticides (harmful for health), makes them vulnerable to exploitation and violence (unsafe

for children) and endangers their education and social development.

(3). Notwithstanding the provisions of paragraph 1 of this Article, national laws or regulations or the competent authority may, after consultation with the organizations of employers and workers concerned, where such exist, authorize employment or work as from the age of 16 years on condition that the health, safety and morals of the young persons concerned are fully protected and that the young persons have received adequate specific instruction or vocational training in the relevant branch of activity. No such instruction or training is provided to the child workers.

Article 7 (1) National laws or regulations may permit the employment or work of persons 13 to 15 years of age on light work that is: (a) not likely 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 programme approved by the competent authority or their capacity to benefit from the instruction received: As highlighted above the children are exposed to unsafe environments and their attendance in the schools is hampered.

Worst Forms of Child Labour Convention, 1999 (No. 182

India ratified the convention in 2017 and it will enter into force on 13 June 2018.

Article 2 For the purposes of this Convention, the term "child" shall apply to all persons under the age of 18.

Article 3 For the purposes of this Convention, the term "the worst forms of child labour" comprises: (a) all forms of slavery or practices similar to slavery, such as the sale and trafficking of children, debt bondage and serfdom and forced or compulsory labour, including forced or compulsory recruitment of children for use in armed conflict; (b) the use, procuring or offering of a child for prostitution, for the production of pornography or for pornographic performances; (c) the use, procuring or

offering of a child for illicit activities, in particular for the production and trafficking of drugs as defined in the relevant international treaties; (d) work which, by its nature or the circumstances in which it is carried out, is likely to harm the health, safety or morals of children.

The children clearly fall under the debt bondage (3a) and nature of work that is harmful to health, safety or morals of children (3d).

INTERNATIONAL REGULATIONS

ILO CONVENTION:

FORCED LABOUR CONVENTION, 1930 (NO 29):

The convention has been ratified by India in 1954 and is in force. Article 2 of the convention mentions:

"For the purposes of this Convention the term "forced or compulsory Labour" shall mean all work or service, which is exacted, from any person under the menace of any penalty and for which the said person has not offered himself voluntarily".

The children working in the hybrid cottonseed production farms as mentioned earlier are sent by parents or lured by mets against advance payments and the children are not allowed to quit the work on their own discretion. The employers withhold their wages if the children decline to work on tasks other than hybrid cottonseed work. Sometimes the wages are not paid at all in such instances. As mentioned earlier, one of the girls we interviewed had to stay on the farm for seven months to get her wages. Further, the worker survey suggests that 76 percent child and 66.4 percent adolescent workers surveyed reported working against advance payments.

UN SUSTAINABLE DEVELOPMENT GOALS (SDG)

The findings have implications for the



achievement of **UN Sustainable Development Goals (SDG) 2030** to which India is a member country. We will highlight the implications for the relevant goals here.

(4.1) By 2030, ensure that all girls and boys complete free, equitable and quality primary and secondary education leading to relevant and effective learning outcomes

<u>Comment</u>: The employment of children in the hybrid cottonseed farms hinders the education of these children. Also, in the amendment to the CLPRA, 2016, the law allows children to be engaged in domestic work after school hours and in vacations. This puts these children under immense pressure to manage both the school and work and



is thus likely to drop out. Thus, the education is neither equitable nor of good quality.

(4.5) By 2030, eliminate gender disparities in education and ensure equal access to all levels of education and vocational training for the vulnerable, including persons with disabilities, indigenous peoples and children in vulnerable situations

<u>Comment</u>: The children working in the hybrid cottonseed farms come from poor tribal villages. Significant portions of these workers are girl children. These children live in vulnerable conditions, which is further worsened by the work in the hybrid cottonseed farms.

(5.2) Eliminate all forms of violence against all women and girls in the public and private spheres, including trafficking and sexual and other types of exploitation

<u>Comment</u>: The children in general and girls in particular are exposed to vulnerable situations in the hybrid cottonseed farms. They are all housed together (males, females, children, adults), they bathe and defecate in the open with no means to prevent any sexual or physical abuse on the farms.

(6.2) By 2030, achieve access to adequate and equitable sanitation and hygiene for all and end open defecation, paying special attention to the needs of women and girls and those in vulnerable situations Comment: The workers in the hybrid cottonseed farms defecate in the open. They have no sanitation and latrine facilities. (8.7) Take immediate and effective measures to eradicate forced labour, end modern slavery and human trafficking and secure the prohibition and elimination of the worst forms of child labour, including recruitment and use of child

soldiers, and by 2025 end child labour in all its forms

<u>Comment</u>: As highlighted above, the children working in hybrid cottonseed farms are a form of forced labour

(16.2) End abuse, exploitation, trafficking and all forms of violence against and torture of children

<u>Comment</u>: The children working in hybrid cottonseed farms are more vulnerable to violence. The violence against these children is often in the form of beatings (with wooden or rubber sticks), verbal abuse or even physical abuse.

Part 4



Child labour in BT cottonse

emerging agenda



TRANSPARENCY & ACCOUNTABILITY IN THE COTTONSEED CHAIN

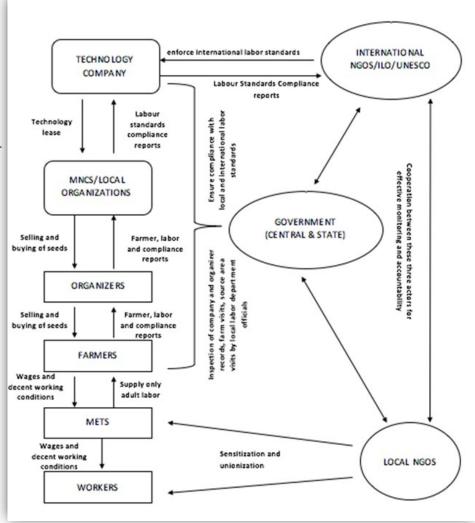
The impact of domestic supply chain pressures on labour clarifies why child labour in cottonseed farms, though a strategy to minimize labour costs by farmers, should not be restricted to just farmers being held accountable. The accountability and thus the responsibility must be traced back to all players who directly and indirectly influence conditions propagating child labour. A horizontal as well as vertical accountability structure should be enforced.

be more responsible in the implementation of ethical standards, like fair wages and working conditions, which in the present situation is completely unregulated and subjectively dependent on the farmer. Seed companies also need to explore other hybrid varieties that reduce the intensity of manual labour in this work, such as GMS seeds.

The actors in the production chain should be accountable to the immediate actors with whom they interact (vertical accountability), and all the actors in the production chain should be accountable to international/local labour organizations/NGOs and the government (Central and State). Figure 4 clarifies the actor interlinkages through which we propose the regulation and accountability to be passed on to different actors to abolish child labour in cottonseed work.

Various stakeholders must make amendments and take the following actions in order to curb child labour:

 Seed companies' responsibility: Seed companies need to



- ◆ Proactive role of government labour department: Labour department should administer and press for labour engagement data from the seed companies. In the absence of any reliable data source, any policy intervention is difficult. Research in this field gets affected adversely due to the absence of reliable secondary data.
- Amendment in CLPRA: The child labour Act needs to be amended to include children working in agriculture as workers. The NCPCR has also suggested the prohibition of children from working in agriculture. The work on hybrid cottonseed farms needs to be listed as hazardous work in the CLPRA Act. Unfortunately, in the 2016 amendment, instead of making the act more stringent has relaxed the conditions for employment of children.
- ♦ Unionisation of mets: The extent of monitoring child labour on Bt cottonseed farms has traditionally proved to be difficult. The government also does not keep a record of child labour on these farms. One of most significant reasons for the shortage of adult labour in this industry is low wages. The unionization of mets by DRMU had led to an increase in wages; however, the union has stopped functioning. The wages of workers in these farms are below the minimum wages and are lower compared to the wages in jobs available in nearby cities. This has led to the Bt cottonseed work being left to children.

In addition to what has been discussed in the previous section, following points emerge from our study and add to our understanding of cottonseed-farm child labour as a phenomenon in North Gujarat and South Rajasthan:

* Shifting landscape: The rapidly shifting landscape of cottonseed farming from nontribal to tribal areas calls for attention to the tribal pockets where there is a high chance of child labour increasing. We found evidence in villages in Dungarpur where cottonseed farming has increased in recent years. Proclamation by organizers and farmers that children working on tribal plots are from the

family and lending help outside of school hours needs critical examination. Child labour is increasing under the shadow of family labour in tribal plots.

- * Sensitization and involvement of local population: The sensitization of local population regarding the rights of children and illegal nature of the engagement of children needs facilitation. Some of the farmers in our interviews revealed pressure from local panchayats against employing children on these farms. This indicates that increased engagement of panchayats can be helpful in curtailing child labour on these farms.
- Improving the earning capacity of tribal families: The prime reason for the employment of children on the cottonseed farms is poverty. The parents send their children to improve the earning capacity of the family. This can only be addressed through affirmative action by the government. The government needs to introduce more livelihood earning schemes, such as MGNREGA, in these regions for these families.
- * Improvement and monitoring in schools:
 The children mentioned beatings as well as boredom in schools as one of the reasons for dropping out of schools. The government needs to pay more attention to the quality of education offered by these schools and monitor the attendance of the children in the schools.
- * Which is better? Local or Migrant?: It seems that though local labouring is better than migrant, especially for children as they are vulnerable to abuse of various kinds, wages are less and almost never paid entirely. It is worthwhile to see in detail how and why local labouring is beneficial and harmful to children who are a part of the country's cotton chain, vis -à-vis migrant work. Understanding how effective our present systems to curb local child labour and regulate work conditions are would have implications on the trajectory taken by this ongoing development.
- Rethinking the logic of child labour preference: Rationales often stated in support



of child labour in this occupation, i.e., nimble fingers, appropriate height, and so on, needs to be seen in the light of its context. Child labour could multiply well due to other reasons like cheap labour when it comes to the volume of work that gets extracted from a child compared to an adult given that both get equal wages. It could also be the ease of supervision and dominance, the scope for showing opportune behaviour and the room to intensify labour that fuels farmers' desirability of child labour in this occupation.

CONCLUDING REFLECTIONS

India's cotton production received impetus with the adoption of Bt cotton, backed by privately controlled Bt cottonseed industry, with North Gujarat as one of the traditional production hubs increasingly being joined by south Rajasthan in the recent years. One of the several fronts where Bt cotton has received criticism is the production of its input (i.e., Bt cottonseed) wherein extreme forms of labour exploitation such as child labour persists in addition to the lack of minimum labour standards, primarily due to two reasons. Firstly, it is due to private players' strategy of pushing the cottonseed production to the informal sector where child labour replenishes due to economic and socio-

cultural conditions of the labour-source areas. Secondly, it is the patchy influence of governmental bodies like labour commissioners to act vigilantly against such issues or seek solutions that motivate employers to abhor such practices. With India becoming the second largest exporter of cotton (ICAC 2017), both domestic and global pressures of production seem to intensify these problems. Exploring factors driving child labour in BT cottonseed production and thereby finding suitable interventions is thus subject to both domestic and international level synchronism of ideas and actions.

In a different setting, Ballet et al. (2014) argue that NGOs' strategies to combat child labour such as labelling which has replaced boycotting, have limitations as well. They suggest finding strategies to not only provoke consumer concerns but also planning monitoring schemes in regions where child labour is unobtrusive. In our study too, apart from economic conditions that directly answer why children are sent to work, socio-cultural conditions are also responsible for making this practice unobtrusive to those who send their children to work or those who use them either as waged or family labour. Thus, we argue for international attention on these two conditions; economic and socio-cultural. Under the economic banner, we pitch for fetching more consumer attention (consumers in the global North in the parlance of global chains) to cottonseed production that can put check to employers' unfair labour strategies, and in assisting unionization of mets to gain better wages for adult workers. Under the socio-cultural banner, improving education can go a long way in uprooting child labour. On the surface, it is linked to the economic logic because children are pulled out of school to work. Yet at the same time, several inefficiencies associated with the schooling system also forbid worker families to remain socially motivated for sending their children to school for long.

Economic banner: There is a need for initiatives such as Better Cotton Initiative (BCI), which can set conditions for production (particularly focussing on no child labour policy) of Bt cottonseed production, monitor adherence, and involve third-party inspections. All the concerned parties - farmers, organizers, suppliers, etc. should be brought under such initiatives to ensure

prohibition of child labour. The other possible way is to link domestic-level hybrid cottonseed production to the supply chains already covered under global ethical sourcing initiatives. This integration of cottonseed production into supply chains monitored by such initiatives will help in eradicating problems of labour exploitation like child labour in the case of Bt cottonseed production.

International cooperation is also helpful in supporting local unions such as DRMU, which was instrumental in unionizing mets and negotiating an increase in the wages. The low wages, as discussed in this as well as in the prior study (Khandelwal et al. 2008), is the primary reason for preference of child labourers in hybrid cottonseed farming. The efforts to unionize mets will help in negotiating better wages for workers as it had previously accomplished. Also as mentioned in the previous report as well, mets form the crucial link between farmers and workers. Sensitization of mets is therefore essential to curb child labour. Further, NGOs (such as MVF), who are lobbying for banning child labour altogether, should be provided support for effective advocacy.

Socio-cultural banner: International cooperation is also needed to improve the educational facilities for the children in the tribal areas which are the primary source areas of labour. While the children drop out of schools primarily due to poverty; however, as uncovered in the interactions with children, local villagers and other during the study, other reasons include beatings at school, lack of teachers/infrastructure, failure of schools to engage children, etc. The national and international NGOs can help in addressing some of these issues through initiatives such as sensitization and training of teachers, provision of infrastructure to schools, and improving engagement of local administration by improving social dialogue among various stakeholders.



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CLRA - Centre for Labour Research and Action

Centre for Labour Research and Action (CLRA) promotes workers' rights in the vast informal sector economy of India. It undertakes research to document work conditions in the informal sector followed by policy advocacy with the state so that workers receive their due entitlements. The Centre has done pioneering work in documenting the seasonal migration streams that feed labour to labour intensive industries like agriculture, brick kilns, and construction. Its work has facilitated development of an alternative paradigm of organizing workers that factors in the constant movement of workers, the critical role of middlemen, the nature of production process, and the socio-economic profile of workers.

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Our research and activities strive towards fair economic relations. The experiences of the poor and their concerns are what guides our thinking. We are committed to fighting discrimination against women. We uncover unjust structures, raise awareness and campaign for change. We develop tools and lines of action for Development organisations, Churches, Trade unions, Politics and Business. Our actions are based on the relationship between justice, peace and the integrity of creation.

SÜDWIND was founded 1991. The founding and its naming were inspired by the U.S. theologian Jim Wallis at the Ecumenical World Assembly in Seoul 1990: "Tomorrow, it will be the **south wind** (German: SÜDWIND) of justice and liberation that breaks the chains of the oppressed." In 2016 we have celebrated our 25th anniversary.

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