

COTTON'S FORGOTTEN CHILDREN

CHILD LABOUR AND BELOW MINIMUM WAGES IN HYBRID COTTONSEED PRODUCTION IN INDIA



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INDIA COMMITTEE OF THE NETHERLANDS (ICN)



STOP CHILD LABOUR COALITION



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Colophon

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The India Committee of the Netherlands

The India Committee of the Netherlands (ICN) is an independent non-governmental organisation campaigning and doing advocacy work on human rights issues. Central to the work of ICN are the issues of caste-based discrimination, labour rights and child labour & education. ICN co-operates with organisations in India and elsewhere in combating discrimination, poverty, oppression, exploitation and lack of education, focusing on the role of policy makers and companies. ICN is an active member of networks like the Stop Child Labour campaign, the Clean Clothes Campaign, the International Dalit Solidarity Network and the Dutch MVO Platform.

Stop Child Labour

'Stop Child Labour – School is the best place to work' (SCL) aims to eliminate all forms of child labour and to ensure quality fulltime education for all children until the age of 15. Stop Child Labour promotes an area-based approach towards the creation of 'child labour free zones' and 'child labour free production chains'. Stop Child Labour calls on consumers, companies, governments and international organisations to be part of the solution.

Stop Child Labour is a coalition coordinated by Hivos. The coalition consists of four non-governmental organizations and two trade unions based in the Netherlands as well as NGOs and unions in Asia, Africa and Latin America.

Glocal Research

Glocal Research provides multi-disciplinary research and consultancy services to (state) governments, non-governmental organizations, corporate bodies and national and international development funding agencies. The organisation has expertise in the areas of agriculture, child labour, natural resource management, rural development and rural livelihoods. Its multi-disciplinary team of professionals has undertaken several research, monitoring and evaluation studies and facilitates training workshops. Glocal Research is established in 2000 and based in Hyderabad, India.

Over the last 15 years Glocal Research has extensively contributed to policy and academic debates on child labour and agriculture in India. The research carried out by Glocal Research on child labour in cotton production has generated substantial debate among scholars, activists, seed companies and policymakers and contributed to the development of several proactive interventions to address child labour in the seed industry.

Executive Summary

- **The research data for 2014-15 shows that children under 14 years still account for nearly 25% of the total workforce in cottonseed farms in India. In 2014-15, a total of around 200,000 children below 14 years were employed in cottonseed farms in Andhra Pradesh, Telangana, Gujarat, Tamil Nadu, Karnataka and Rajasthan states. Gujarat, which has the largest cottonseed production area in the country accounts for nearly 55% of the total children employed in this sector (110,000).** The persistence of child labour on a large scale is due to the limited coverage and insufficient impact of the present interventions. This is even more the case for adolescent children. There are now 281,200 children between 15 and 18 years working in the cottonseed fields while this number was 190,450 in 2006-07. This is an increase by almost half.
- The other issue of major concern in cottonseed production discussed in this report is payment of minimum wages to workers. **A comparison of prevailing market wages with the statutory minimum wages fixed by the respective state governments clearly indicates that the legal norms are not followed, especially for certain categories of workers and activities.** The prevailing wage rates for cross-pollination activity which is the vital activity in seed production, are 46.5% below the legal minimum wage in Karnataka, 9.4% below in Andhra Pradesh, 25% below the legal minimum wage in Telangana. In Gujarat they are 6.6% to 16.6% below the legal minimum wage in Sabarkantha and Choutoudaipur respectively.
- **This present report examines the recent trends in the employment of children and the issue of below minimum wages in hybrid cottonseed production in India.** The field survey for the present study covered a sample of 396 cottonseed farms in 72 villages that are producing seed for both MNCs and major Indian seed companies in the six Indian states namely Andhra Pradesh, Telangana, Tamil Nadu, Rajasthan, Karnataka and Gujarat which account for nearly 95% of the total cottonseed production in India.
- **The recent figures regarding the magnitude of child labour, measured in terms of proportion of children to the total workforce and the average number of children employed per acre, in hybrid cottonseed production in India show a declining trend in all the states.** The decline is significant in Andhra Pradesh, Tamil Nadu and Karnataka. However, this has not translated into a decline of the total number of children employed on cottonseed farms, particularly in Gujarat. The latter is due to a substantial increase in the production area in these states.
- **As a result of the efforts of local and international NGOs, the government, media and social investors, awareness has been created.** Interventions by various agencies, including governmental agencies, the National Commission for Protection of Child Rights, NGOs like MV Foundation and a union like DRMU, the seed industry and international organisations like ILO, UNICEF and UNDP have in combination had a positive impact and **helped to reduce child labour in the cottonseed industry.** The India Committee of the Netherlands (ICN), International Labour Rights Forum (ILRF) and the Stop Child Labour coalition have – through its range of reports on the issue and engagement with companies – triggered and supported these efforts by putting ‘the facts on the table’, seeking public attention and encouraging companies to take action.

- **Despite the decline, the total number of children still employed in the cottonseed sector is huge. The conditions in the fields continue to be very unsafe and exploitative for the children.** The children are made to work long hours and are paid less than market and official minimum wages. They are also **exposed to poisonous pesticides** used in high quantities in cottonseed cultivation and are often trafficked as migrants from other places. The existing employment practices in cottonseed farms result in the denial of rights of children and violate many national laws and international conventions
- **The response of some of the state governments to address the problem of child labour in this sector has not been very encouraging.** The government of Gujarat and Rajasthan, except initiating a few steps to control the trafficking of children from Rajasthan to Gujarat cottonseed fields, have not paid serious attention to tackle the issue. They are in a 'denying mood' about the existence of large number child labourers in this sector. In fact the employment of children on family farms, which has increased recently, has not received any serious attention from the state governments of Gujarat and Rajasthan.
- **There is a misconception, which is propagated by government and some seed companies, that most of the working children in seed production are family labourers who help their parents during school holidays and before and after school hours. This is not correct.** Though there is an increase in the composition of family children in total workforce in recent years, they still constitute a small portion of total working children. In 2014-15, family children accounted for less than 30% of the total working children in Andhra Pradesh, Tamil Nadu and Karnataka. Also the study noted that most of the children found working on seed farms were school drop-outs who are now working as a full time workers. They accounted for nearly 62% of the total working children in Andhra Pradesh and Karnataka. In other states the proportion of school drop-out children varied between 55% and 58%.
- **The response from the seed industry as a whole to address the problem of child labour is minimal.** Despite acknowledging the problem and promising steps to address the problem of child labour, seed companies, except for a few multinationals and local companies, to date have not taken any serious efforts to tackle the issue on the farms that are producing seed for their companies. The initiatives undertaken by Bayer, Monsanto, Du Pont and few local companies have had some positive impact in reducing the number of working children. However, their efforts have only a limited impact on the overall magnitude of child labour in the industry. Unless all the major seed companies come forward and implement serious measures in collaboration with other stakeholders, it is difficult to combat the overall problem of child labour.
- **The minimum wages issue has not received as much attention as child labour and no serious efforts were made to tackle this issue either by the government, the seed industry or by civil society organizations, except the work by the union DRMU in Gujarat.** There is lack of awareness about the Minimum Wage Act among workers and farmers. The workers in cotton seed production are not well organized and there are no active worker organizations operating in most of the areas.

CHAPTER I

INTRODUCTION

1.1 Background

The issue of child labour and below minimum wages, especially among women, in the production of hybrid cottonseeds in India has received wide attention in recent years. Since 1998 a number of studies have been conducted on the nature and magnitude of child labour, the working conditions of children, the reasons for large scale employment of children in this sector and the role of large-scale national and multinational seed companies (MNCs) contributing to this problem¹. 'Seeds of Child Labour - Signs of Hope: Child and Adult labour in Cottonseed production in India' jointly published by ICN, Stop Child Labour and ILRF in 2010, is the latest report available on the overall situation of child labour in hybrid cottonseed production in different states of India.² According to this report despite some improvements in the areas where interventions have been implemented, large numbers of children continued to be employed in hybrid seed production. In the 2009-10 cultivation season, nearly 381,500 children under the age of 18, about 45% of them younger than 14, were employed for the production of hybrid cottonseeds in the states of Gujarat, Andhra Pradesh, Tamil Nadu and Karnataka. 90% of the seed production in India is concentrated in these states. A study conducted on wages in 2012 indicates that payment of minimum wages was still a considerable issue at seed production farms. The wage rates for certain production activities, in which mainly women were involved, were below the state prescribed legal minimum wages³.

Since 2010, many developments have occurred which have influenced the nature and magnitude of child labour and working conditions of the labourers in the Indian seed industry. The intensified pressure from international NGOs and social investors like Norges Bank urged multinational companies (MNCs) like Bayer, Monsanto, Syngenta and DuPont to continue their efforts to address the problem of child labour in their supply chain. The decision of Norges Bank to exclude Zuari seed company from its investment portfolio in 2013, as result of the

¹ Important studies on the issue of child labour in hybrid cottonseed production in India include 1) Venkateswarlu, Davuluri (2001) '*Seeds of Bondage: Female Child Bonded Labour in Hybrid Cottonseed Production in Andhra Pradesh*' published by Business and Community Foundation and Plan International (India Chapter) New Delhi (<http://www.indianet.nl/sob.html>), 2) Venkateswarlu, Davuluri. and L. da Corta (2001) '*Transformations in Age and Gender of Unfree Workers on Hybrid Cottonseed Farms in Andhra Pradesh*' Journal of Peasant Studies, Vol. 28, No. 3, pp 1-36, 3) Ramamurthy, Priti (2000) '*The Cotton Commodity Chain, Women, Work and Agency in India and Japan: The Case for Feminist Agro-Food Systems Research.*' World Development 28(3): 551-578, 4) Venkateswarlu, Davuluri (2003), '*Child Labour and Trans-national Seed Companies in Hybrid Cottonseed Production in Andhra Pradesh*', study commissioned by the India Committee of the Netherlands (<http://www.indianet.nl/cotseed.html>), 5) Venkateswarlu, Davuluri (2007), '*Child bondage continues in India cotton supply chain*' study commissioned by India Committee of the Netherlands, ILRF, DWHH, OECD Watch (<http://www.indianet.nl/pdf/childbondagecotton.pdf>), 6) Ashok Khandelwal, Katiar Sudhir and Madan Vashnav (2008) '*Child Labour in Cottonseed Production: A case study of cottonseed farms in North Gujarat*' Dhakhina Rajasthan Majdur Union (<http://www.indianet.nl/pdf/drmureport.pdf>)

² Venkateswarlu, Davuluri (2010) 'Seeds of Child Labour - Signs of Hope; Child and Adult Labor in Vegetable Seed Production in India' jointly published by ICN, ILRF and Stop Child Labor (<http://www.indianet.nl/pdf/signsofhope.pdf>)

³ Venkateswarlu, Davuluri and Jacob Kalle (2012) 'Wages of Inequality of Inequality: Wage Discrimination and Underpayment in Hybrid Cotton and Vegetable Seed Production in India' jointly published by ICN and Fair Labor Association (<http://www.indianet.nl/pdf/WagesOfInequality.pdf>)



prevalence of child labour, sent strong signals to companies about human rights concerns of social investors⁴. Other companies like Namdhari, Kalash Seeds (formerly Bejo Sheetal), Advanta, Nuziveedu etc. have started interventions, though in a limited way, to address the issues of child labour in their suppliers' farms.

Since 2010 the total area under hybrid cottonseed production increased in India by 40% due to a growing demand for hybrid cottonseeds in the market on account of rise in area under commercial cotton. Large companies are slowly increasing their control over the cottonseed industry by expanding their production area and also by acquiring smaller companies. Seed companies are relocating and expanding their production to new areas situated in remote pockets where the availability of labour for seed production is not an issue. In Gujarat and Tamil Nadu, all the new production locations are situated in remote tribal areas. In recent years Rajasthan has also emerged as one of the important locations for hybrid cottonseed production. Some of the companies have expanded their production to tribal locations in south Rajasthan, which used to be the area for labour supply to cottonseed fields in Gujarat. The expansion and relocation of production into remote tribal areas and the decline in the average size of production units has had significant implications for the composition of the workforce. In the new production locations, most of the seed growers are small subsistence farmers who often depend on their own family's labour, including the labour of their children.

⁴ See: <http://www.indianet.nl/NorwegianPensionFund.html>

The Government of India (Gol) – in particular the *National Commission for Protection of Children's Rights (NCPCR)* – has in the past taken serious note of the issue and initiated several measures to address the problem. Since 2010 the Gol has been implementing the Right to Education Act. The local NGOs particularly in Andhra Pradesh (*MV Foundation, CARE, Shramika Vikas Kendra* etc.) and Gujarat and Rajasthan (*Dakshini Rajashtan Majdoor Union, Seva Mandir* etc) have intensified their campaign. UNICEF and Save the Children Fund with the support from IKEA and H&M (Hennes and Mauritz) have been implementing projects to address the problem of child labour in cottonseed production areas in Andhra Pradesh, Karnataka, Tamil Nadu, Gujarat and Maharashtra.

In the context of the developments mentioned above, the present study makes an attempt to assess the current situation of child labour and minimum wages on cottonseed farms in India.

1.2 Nature of child labour problem in cottonseed production

Hybrid cottonseed production in India is concentrated in six states, namely Andhra Pradesh, Telangana, Tamil Nadu and Karnataka in South India and Gujarat and Maharashtra in the central part of India. These six states account for nearly 95% of total cottonseed production in the country. Until recently, Andhra Pradesh used to be the largest producer of cottonseed but now Gujarat has overtaken this position.

The specificity of hybrid cottonseed production in India is that a significant portion of the labour force in this sector are children, particularly girls. No other industry in India has such a high proportion of child labour in its workforce (Venkateswarlu, D. 2001). Hybrid cottonseed production is a labour intensive activity. A main part of this production is cross-pollination⁵ which is done manually. This activity alone requires about 90% of the total labour and is done mostly by children. Children are employed on a long-term contract basis through advances and loans extended to their parents by local seed producers, who have agreements with the large national and multinational seed companies. Children are made to work 8 to 12 hours and are paid less than the market and official minimum wages. They are also exposed to poisonous pesticides used in high quantities in cottonseed cultivation. Most of the children working in cottonseed farms belong to poor families from Scheduled Castes (SCs) or Dalits, Scheduled Tribes (STs) or Adivasi, and Backward Castes (BCs).

Farmers employ children, particularly girls, primarily in order to minimize costs. In cottonseed production, the labour costs account for about 50% of total cultivation costs (Venkateswarlu, D. and Da Corta, L. 2005). Farmers endeavour to cut these labour costs by hiring children because the wages paid to children are far below both the market wages for adults in other agricultural field work and even further below official minimum wages. Farmers also hire children in preference to adults because farmers can squeeze out higher productivity from children per day. Children will work longer hours, will work much more intensively and they are generally much easier to control than adult workers – whether through verbal or physical abuse or through inexpensive treats like chocolate or hair ribbons (Venkateswarlu, D. and Da Corta L. 2001, Ramamurthy Priti, 2000).

According to Sivaramakrishna, a seed farmer in Mahabubnagar district, Telangana, 'cross-pollination work is very labour intensive and a large number of labourers are required to do this work. It is also delicate work and needs to be handled carefully. We prefer young girl children for this task because with their delicate fingers (nimble fingers) they can handle this work better than adults. They also work more intensively than adults. We can control

⁵ Cross-pollination involves two separate activities: emasculation and pollination. In plants crossing is done by placing pollen grains from one genotype - the male parent on to the stigma of flowers of the other genotype, the female parent. The removal of stamens or anthers or killing of pollen grains of a flower without effecting in any way the female reproductive organs is known as emasculation. About two months after sowing, the plant starts blossoming and continues growing for three to four months. During this time, cross-pollination (both emasculation/pollination) needs to be done every day, without fail. The duration of cross-pollination activity is 60 to 90 days and doing this work in one acre farm requires 10 to 15 labourers per day.

them easily. They listen to us and do whatever we ask them to do. The most important thing is labour costs. Nearly half of our investment goes towards payment of labour charges. The wage rates for children are far lower than adult wages. We can reduce our labour costs considerably if we hire girl children. If we want to hire adult labour we have to pay higher wages. With the current procurement price we get from the seed companies we cannot afford to pay higher wages to the labourers'. (This quote is reproduced from report 'Child bondage continues in Indian cotton supply chain', 2007.)

The exploitation of child labour on cottonseed farms is linked to larger market forces. Several large-scale national and multinational seed companies, which produce and market the seeds, are involved in perpetuating the problem of child labour. The economic relationship behind this abuse is multi-tiered and complex and masks legal and social responsibility. Cottonseed production is carried out through contract farming. Companies depend upon local farmers for seed production. They arrange seed buy back arrangements with local farmers through middlemen called 'seed organizers'. Seed organizers mediate between companies and farmers. Although seed companies are not directly involved in the production process, they exert substantial control over farmers and the production process by supplying foundation seed, advancing production capital, fixing the procurement prices and through stipulating quality controls (Venkateswarlu D. 2003).

The employment of children in cottonseed work has an adverse impact on literacy and health of children. Most of the children working in cottonseed fields are either school dropouts or have never attended school (Venkateswarlu, D. 2001). Working in cottonseed fields also has important health implications for the children involved. The use of pesticides in hybrid cottonseed cultivation is high and children working on farms are directly exposed to poisonous pesticides for prolonged periods. A report published by Physicians for Human Rights in 2003⁶ pointed out that children working in cottonseed farms are exposed to various health risks. The general health problems reported by children working in cottonseed farms include severe headaches, nausea, weakness, convulsion and respiratory depression. Few cases of children's deaths due to pesticide exposure were also reported in Andhra Pradesh.

The large scale employment of children in hybrid cottonseed production has a very adverse impact on employment opportunities and working conditions of adult labour. In areas where cottonseed production is concentrated there is widespread underemployment problem for adult labour, particularly for women. Mahabubnagar district in Telangana state where cottonseed production is concentrated is well known across the country for large scale distress migration of agricultural labourers to urban areas in search of wage work (Venkateswarlu, D. 2001).

The existing employment practices in cottonseed farms result in the denial of children's rights and violate many national laws and international conventions. Children's right to education, health and safe living are denied by employing them on the farms on a long term contract basis, making them to work long hours and exposing them to poisonous pesticides that are applied in high quantities on the plants (Venkateswarlu, D. 2001). Securing of children's labour through giving loans/advances to their parents and compelling them to work until the loan is repaid, long hours of work and paying less than minimum wage violates many Indian laws including: The Children (Pledging of Labour) Act 1933, The Bonded Labour System (Abolition) Act 1976, The Child Labour (Prohibition and Regulation) Act 1986 and The **Right of Children to Free And Compulsory Education Act 2009**. It also violates ILO Convention No. 138 regarding minimum age for admission to employment, Convention No. 182 which prohibits worst forms of child labour and the UN Convention on the rights of the child (1989).

⁶ Physicians for Human Rights Child Rights Group (2003) 'Child labour in India: A Health and Human Rights Perspective' The Lancet, December, 2003, Vol 362.

1.3 Objectives of the study

- To examine the current situation of child labour at hybrid cottonseed farms in six Indian states, including Andhra Pradesh⁷, Telangana, Tamil Nadu, Rajasthan, Karnataka and Gujarat.
- To compare the issues of child labour and the (minimum) wages between a) farms producing seed for MNCs and major Indian companies and b) farms producing seed for companies that are implementing interventions against child labour and farms that do this hardly or not.
- To study the impact of recent interventions of the seed industry, the governments (both national and state), NGOs and social investors to combat child labour in the Indian cottonseed industry.

1.4 Methodology and sample

The field survey for the present study was conducted between July 2014 and January 2015. The study is mainly based on the analysis of primary data collected through field visits to 396 sample cottonseed farms in 72 villages that are producing seed for both MNCs and major Indian seed companies in the six Indian states. These six states account for nearly 90% of the total cottonseed production in India. Out of 396 farms surveyed, 60 are in Andhra Pradesh, 56 are in Telangana, 100 in Gujarat and 60 each in Rajasthan, Tamil Nadu and Karnataka. Table 1 provides an overview of the state wise distribution of sample farms that were surveyed.

Table 2 presents a company wise break up of sample farms included in the survey in different states. Of the total 396 farms surveyed 138 (35%) were producing seed for multinationals or its joint venture partners and the remaining 258 for local Indian companies. The names of MNCs included in the survey are Monsanto and its Indian partner Mahyco (Monsanto holds 26% share in Mahyco), Bayer, Advanta (owned by United Prosperous Ltd) and Xylem Seeds (subsidiary of DuPont Pioneer). The names of important local Indian seed companies included in the survey are Nuziveedu Seeds, Kaveri Seeds, Ajith Seeds, Bio Seeds, JK Seeds, Ankur Seeds, Raasi Seeds, Tulasi Seeds, Vikram Seeds, Nath Seeds, Kalash Seeds and Vibha Seeds.

In Gujarat the survey was conducted in six districts: Sabarkantha (Idar and Khedbrahama taluk), Banaskhantha (Diodar taluk), Chotaudaipur (Badoli taluk), Mahisagar (Lunawada taluk), Panchamahar (Jambhuguda taluk) and Aravali (Meghraj taluk). In Andhra Pradesh Kurnool district and in Telangana Mahabubnagar district were selected for the survey. In Tamil Nadu the survey was conducted in Attur taluk of Salem district which is the main production centre for cottonseed in Tamil Nadu. In Karnataka the survey covered three districts: Gadag (Ron taluk), Koppal (Yelberga taluk) and Kolar (Chitamani taluk). In Rajasthan the seed production is concentrated in Dungarpur and Udaipur districts. The survey covered both these districts. The selection of districts, villages and farms for the study was based on both random and purposive sampling methods.

Table 1: State wise distribution of sample farms surveyed

State	Indian companies	Multinational companies (MNCs)	Total
Andhra Pradesh	36	24	60
Telangana	48	8*	56

⁷ Andhra Pradesh state in India was divided into two states in June 2014: Andhra Pradesh and Telangana. Andhra Pradesh has three distinct regions namely Coastal Andhra, Rayalaseema and Telangana. Telangana region is now created as a separate state. For the purpose of comparison of figures with previous years the name of Andhra Pradesh, unless specifically mentioned, in the report is referred to un divided Andhra Pradesh state which includes the areas in the present Telangana state.

Gujarat	60	40	100
Karnataka	30	30	60
Tamil Nadu	42	18	60
Rajasthan	40	20	60
Total	258	138	396

* Most of the MNCs (Bayer, DuPont, Advanta) currently have no production in Telangana.

Table 2: Company wise distribution of sample farms surveyed in different states

Name of company	Total farms
Multinational companies	
Monsanto	39
Bayer	28
Mahyco (Monsanto partner in cottonseed business)	45
Advanta (United Prosperous Ltd)	4
Xylem Seeds (subsidiary of DuPont Pioneer)	22
Sub total	138
Indian companies	
Nuziveedu Seeds	49
Ajith Seeds	30
Raasi Seeds	34
Bio Seeds	26
Kaveri Seeds	44
Ankur Seeds	16
JK Seeds	18
Vikram Seeds	11
Kalash Seeds	6
Other small companies	22
Sub total	258
TOTAL	396

Note: The proportion of sample size among MNCs and Indian companies (34.8% MNCs and 65.2% Indian companies) as a group closely represent their overall share in the market. However, the sample share of individual companies within the group does not exactly represent their overall position in the market. As per the data collected by this study, cottonseed was grown in about 95,000 acres in 2014-15, out of which 32% was controlled by MNCs, 66% by Indian companies and remaining 2% by public sector corporations. Although Mahyco is a Indian company and its operations are largely confined to India it is included in MNCs category because of its close business relationship with Monsanto. Monsanto holds 26% shares in Mahyco and both of them are equal partners in MMB (Mahyco- Monsanto Bio tech Limited) which control the distribution of Bt technology in India.

Information on age and gender composition of workers, wage rates and working conditions was gathered through separate interviews and discussions with labourers and seed farmers and also through field observations. A total of 789 workers including 468 child workers and 256 seed farmers were interviewed. In some cases age determination was found difficult by the field investigators by physical observation or discussions with workers. Workers who may be 13 or 14 years old also reported their age as above 14 years knowing that the law prohibits employment of children below 14 years. Age determination was found difficult in 221 cases of young workers and such cases were recorded separately as age doubtful cases (category 'probably children'). While

estimating the total number of children below 14 years, it was decided to take into account 50% of the number of workers in the 'probably children' category as children below 14 years. This is based on the assumption that the chance of a worker in the 'probably children' category is a child below 14 years, is around 50%.

As per the investigators' observations in the field and our considered opinion based on that, calculating 50% of the workers in the 'probably children' category as definitely children is the best guess. During the field visits to farms 64 children in 48 fields were running away from the fields after they saw the study team approaching the farm. These children were included in the category 'probably children'.

No official data are available on the total area under cottonseed production and the area covered by individual seed companies. This information was gathered through discussions with representatives of seed companies and key informants in the seed industry. The total number of child labourers in cottonseed production for the 2014-15 crop season was estimated for each state separately. The average requirement of labour per acre and the proportion of child labour to the total workforce in the sampled farms were used to calculate the average number of child labourers per acre. By extrapolating the sample data to the total area under cottonseed production in each state, the total number of child labourers on cottonseed farms was calculated.

1.5 Structure of the report

The report is divided into eight chapters. The context for the present study, scope, objectives and methodology are discussed in chapter I. The structure of the seed industry and recent developments in organization seed production that have significant implications for the composition of the workforce and the nature and magnitude of child labour in the cottonseed industry are presented in chapter II. The magnitude of child labour and profile of the working children in sample cottonseed farms during 2014-15 crop season in different states were presented in chapter III. To analyze the trends in the employment of children the data for 2014-15 is compared with previous years data (2009-10 and 2006-07). The estimates of total number of children employed in cottonseed farms in different states based on extrapolation of data from sample farms are presented in chapter IV. The recent interventions against child labour in cottonseed production by different agencies are presented in Chapter V. In chapter VI an analysis of prevailing wage rates in cottonseed production is discussed. The prevailing wage rates are compared with statutory minimum wages to find out implementation of minimum wages in cottonseed farms. Summary of findings and conclusions are presented in Chapter VII. Recommendation are included in chapter VIII



CHAPTER II

RECENT DEVELOPMENTS IN THE INDIAN COTTONSEED INDUSTRY

2.1. Introduction

The hybrid seed industry is one of the fastest growing industries in India. With a total value of USD 2 billion in 2013, India's seed market is now one of the biggest in the world⁸. Almost 40% of the 2 billion USD contains the value of the hybrid cottonseed industry.

India accounts for about 18% of the world's cotton production and is the second largest producer of cotton in the world after China. With around 12 million hectares India has the largest area under cotton cultivation in the world, which constitutes about 25% of the world area under cotton cultivation. There has been an overall increase in the total area under commercial cotton production and productivity of cotton in India in recent years. Table 3 presents an overview of the area and productivity of cotton production in India since 2006-07. The total area under cotton production has increased from 22.6 million acres in 2006-07 to 31.3 million acres in 2014-15. The average yields per acre are cotton increased marginally during this period: from 210.85 Kgs in 2006-07 to 217.3 Kgs in 2014-15. The increase in production area and yields are largely attributed to the introduction of Bt (*Bacillus thuringiensis*) technology in cotton hybrids⁹ and favourable climatic conditions.

Table 3: Trends in Area and Productivity of Cotton in India

Year	Production Area (lakh acres)	Production (lakh bales)	Productivity (Kgs per acre)
2006-07	225.95	280.00	210.85
2007-08	232.62	307.00	224.20
2008-09	232.42	290.00	212.06
2009-10	254.76	305.00	203.56
2010-11	275.32	339.00	209.23
2011-12	300.92	353.00	199.51
2012-13	296.00	365.00	209.63
2013-14	289.77	398.00	225.41
2014-15 (projected)	312.58	400.00	217.32

Source: The Cotton Corporation of India, <http://cotcorp.gov.in/index.aspx>

⁸ According to International Seed Federation estimates the global commercial seed market value was USD 45 billion and the Indian seed market value was USD 2 billion in 2013.

⁹ The term "hybrid" refers to a plant variety developed through specific, controlled crossing of two parent plants. Usually, the parents are naturally compatible varieties within the same species. This hybridization, or the crossing of compatible varieties, happens naturally in the wild; plant breeders basically just steer the process to control the outcome. Unlike hybrids, which are developed in the field using natural, low-tech methods, GM varieties are created in a lab using highly complex technology, such as gene splicing. These high-tech GM varieties can include genes from several species — a phenomenon that almost never occurs in nature. The Bt technology developed by Monsanto includes genetic material from the bacterium Bt (*Bacillus thuringiensis*), which kills bollworm pest. In India hybrid technology was introduced in cotton in 1970s itself. In early 2000s Bt technology was incorporated in existing cotton hybrids. Whether it is traditional hybrid or Bt hybrid the process used for multiplication of seed (emasculation and pollination) is same.

The area under Bt cotton hybrids, has seen a significant increase in recent years. Bt cotton was officially introduced in India in 2002-03. Beginning with 93,992 acres in 2002-03, the area under Bt cotton hybrids increased to nearly 31 million acres covering about 94% of the total cotton area in 2013-14. Monsanto, which has patent rights over Bt genes, has sub-licensed the use of its genes to several Indian seed companies which have incorporated Bt genes in their proprietary hybrids.

2.2 Increase in the seed production area

The growing demand for hybrid seeds in the market and the rise in area under commercial cotton resulted in an increasing area under cottonseed production. Table 4 presents the total area under cottonseed production by state since 2006-07. In India, hybrid cottonseed production is concentrated in six states, namely Andhra Pradesh, Telangana, Gujarat, Rajasthan, Tamil Nadu and Karnataka accounting for nearly 90% of cottonseed production area in India. Of the total 95,000 acres of cottonseed production in India in 2014-15, Gujarat has the largest area covering nearly 50% (48,000 acres), followed by Andhra Pradesh (including Telangana) with 17,000 acres (18%), Karnataka with 9,000 acres (11.6%) and Tamil Nadu with 7,000 acres (7.4%).

The total area under cottonseed production increased from nearly 60,000 acres in 2006-07 to 95,000 acres in 2014-15. In 2006-07, the cottonseed production area covered by Bt cotton hybrids was around 65% (40,000 acres



out of 60,000 acres) which has increased to nearly 95% (90,000 acres out of 95,000 acres) in 2014-15. The hybridization process involved in production of cottonseeds is the same for both traditional and Bt hybrids.

Hybridization, which is a vital activity in cottonseed production, is carried out through hand emasculating and pollination methods using a large labour force.

Table 4: Trends in area under hybrid cottonseed production in India

State	2006-07	2009-10	2014-15
Andhra Pradesh + Telangana	16,000	12,000	17,000
Gujarat	25,400	38,000	48,000
Rajasthan	0.0	0.0	5,000
Karnataka	5,000	8,000	11,000
Tamil Nadu	9,000	5,000	7,000
Other states (Maharashtra, Madhya Pradesh etc.)	5,000	5,000	7,000
Total	60,400	68,000	95,000

Note: No official data are available on the total extent of area under cottonseed production and the area covered by individual seed companies. The figures mentioned are approximates and information was gathered through discussions with representatives of seed companies and key informants in the seed industry. The figures for 2006-07 and 2009-10 derive from previous studies

Until the 1990s, Andhra Pradesh was the largest state in the production of hybrid cottonseeds in India. After the introduction of Bt cotton in the early 2000s, the area under cottonseed production in Gujarat rapidly increased and it has now become the largest cottonseed producing state in India. Since 2006-07, the area under cottonseed production in Gujarat increased by nearly 90% from 25,400 acres to 48,000 acres. Due to the growing demand for hybrid seeds, seed companies are expanding their production volumes and areas under seed production. They have chosen Gujarat to expand their production area since the productivity and quality of seed produced is relatively better in Gujarat than in other states. The availability of cheap labour to work on cottonseed farms is another reason for seed companies to expand their production area in Gujarat. All major seed companies both Indian and MNCs have production facilities in Gujarat.

2.3 Growing control of MNCs and big companies

The production and marketing of hybrid cottonseed in India is almost fully controlled by the private sector. During the 1970s, the public sector seed corporations played a dominant role in the development, production and marketing of hybrid cottonseeds. However, since 1985, the role of private seed companies in the cottonseed industry has been growing rapidly. Currently, private seed companies, both MNCs and Indian companies, account for nearly 98% of the total cottonseed produced and marketed in the country. Table 5 presents the share of private and public sector agencies in the production of hybrid cottonseed in India. The share of public sector agencies like KSSC (Karnataka State Seed Corporation), GSSDC (Gujarat State Seed Development Corporation), APSSDC (Andhra Pradesh State Seed Development Corporation), MSSDC (Maharashtra State Seed Development Corporation) and NSC (National Seed Corporation) in the production of hybrid cottonseeds is reduced from around 8% in 2006-07 to 2% in 2014-15.

Table 5: The production area controlled by MNCs and Indian companies (area in acres)

Company	2006-07	2009-10	2014-15
A) Private seed companies			
MNCs and its joint venture partners (Bayer, Monsanto, Advanta, DuPont and Mahyco)	7680 (12.7%)	15000 (22.0%)	30000 (31.6%)
Indian companies	47720 (79.0%)	50000 (73.5%)	63000 (66.3%)
B) Public sector corporations			
Public sector corporations	5000 (8.3%)	3000 (4.4%)	2000 (2.1%)
Total area	60400 (100.0%)	68000 (100.0%)	95000 (100.0%)

Note: Similar data used as in table 4

In recent years further market concentration took place in the Indian seed industry. MNCs and large Indian companies are slowly increasing their control over the seed industry by expanding their production area and also by acquiring smaller companies.

The area directly controlled by MNCs and their business partners is consistently growing since 2003-04. The production area controlled by Monsanto, Bayer, DuPont, Advanta, Mahyco (Monsanto partner) increased almost four times from 7,680 acres in 2006-07 to 30,000 acres in 2014-15. During the same period the share of MNCs in the total production area increased from 12.7% to 31.6%.

Despite the relative decline in the area under production controlled by Indian companies in recent years, they still hold control over two-third of the production areas, while also increasing their acreage. During 2014-15 nearly two third of the production area (63,000 out of 95,000 acres) was controlled by Indian companies. There were about 200 Indian companies in the early 2000s and their number has now been reduced to around 100 companies in 2014-15. The leading Indian companies involved in the production and marketing of cottonseeds are Nuziveedu, Kaveri, Ajit, Raasi, Bioseed, Ankur, Vikram, Vibha, JK Seeds, Dhanya, Green Gold, Tulasi, Nath and Krushidhan.

The top five leading Indian companies: Nuziveedu, Kaveri, Ajit, Raasi and Bioseed together control nearly 50% of the total cottonseed production area in the country. Kaveri, Ajit and Bioseed have recently emerged as leading players. Kaveri is a public limited company listed in the Indian stock market. The cottonseed business helped the company to perform extremely well and the stock price of the company increased more than 30 times from its Initial Public Offer (IPO price of Rs 150-170 in 2007 to Rs 5,300 March in 2015¹⁰). Nuziveedu is planning to be listed in the stock market and in April 2015 filed papers with market regulator SEBI (Securities and Exchange Board of India)¹¹. Nuziveedu and Kaveri have recently received huge private investments from global investors¹².

¹⁰ http://profit.ndtv.com/stock/kaveri-seed-company-ltd_kscI

¹¹ <http://profit.ndtv.com/news/market/article-nuziveedu-seeds-files-ipo-papers-with-sebi-757611>

¹² Blackstone GPV Capital Partners Mauritius V-C Limited invested 2500 million rupees in Nuziveedu Seeds in 2010. Oppenheimer International Small Company Fund and HSBC Bank (Mauritius) Limited holds nearly 10% of share in Kaveri Seeds.



2.4 Relocation and expansion of production to new areas

Seed companies are relocating and expanding their production to new areas that are situated in remote pockets where sufficient labour is available for seed production. In Gujarat and Tamil Nadu all the new production locations are situated in remote tribal pockets which used to be the major sourcing areas for labour supply to cottonseed farms in these states. Traditionally cottonseed production in Gujarat is concentrated in the northern part of Gujarat in four districts, namely *Sabarkantha*, *Banaskantha*, *Mehasan* and *Gandhinagar*. In recent years the production has spread to remote tribal pockets in new districts like *Chota*, *Udaipur*, *Mahisagar*, *Aravali* and *Panchmahal*. In Tamil Nadu traditionally seed production is concentrated in *Attur* Taluk in *Salem* district and *Kalkurch* taluk in *Villupuram* district. Now the production is slowly moving to new locations like *Karumandarai Hills* in *Salem* district and *Sitteri* area in *Dharmapuri* district which are predominantly tribal areas and used to be the major sourcing area of labour supply for cottonseed production in *Attur* area. See table 6 for an overview of the relocation and expansion of cottonseed production to new areas.

The southern part of Rajasthan has recently emerged as an important location for cottonseed production. The tribal areas of *Udaipur* and *Dungarpur* districts in south Rajasthan used to be the prime sourcing areas for labour for the cottonseed production in Gujarat. During 2006-07 nearly 70% of the workforce in Gujarat's cottonseed

farms were seasonal migrant labourers mainly from south Rajasthan and tribal pockets within Gujarat. The seasonal migration of labour from Rajasthan and tribal locations within Gujarat has come down significantly in recent years. The seasonal migrant labour accounted for only 30% of the total workforce on cottonseed farms in Gujarat in 2014-15.

In Gujarat in 2014-15 roughly 75% of the seed production was concentrated in remote tribal pockets of *Panchmahal, Chota, Udaipur, Mahisagar, Sabarkantha* and *Aravali* districts. In the new locations most of the seed farmers are marginal landholders. More than 90% of them are tribal people who depend upon their family labour for their basic needs. In Rajasthan 95% of the production is concentrated in tribal pockets of *Kotada* and *Jadol* taluks in Udaipur district and *Vinchivada, Virpur* and *Simalwara* taluks in Dungarpur district.

Table 6: Relocation and expansion of cottonseed production to new areas

State	Traditional seed producing areas	New seed production areas
Gujarat	Idar, Vadali, Himmatnagar taluks in Sabarkantha district, Mansa in Gandhinagar district, Vijapur and Kheralu in Mehsana district, Diodar, Palanpur Kankrej in Banaskanth district	Lunawada in Mahisagar district, Jambhuguda in Panchmahal district, Pavejetpur, Bodoli in Chota Udaipur district, Khedbrahma in Sabarkantha, Bhiloda and Meghraj in Aravali district
Tamil Nadu	Attur taluk in Salem and Kalkurchi in Villupuram district	Karumandarai Hills in Salem district and Sitteri area in Dharmapuri district
Karnataka	Gajendragud and Ron in Gadag district, Yelberga in Koppal district	Chintamani in Kolar district
Rajasthan		Kotada and Jadol in Udaipur district, Vinchivada, Virpur and Simalwara in Dungarpur district

2.5 Shifting production from large commercial farms to small family based farms

The shift of production from large commercial farms to small family based farms is a new trend which began in the mid-2000s and further accelerated in recent years. Due to reduction in profit margins on account of rise in production costs, mainly labour costs, and stagnant prices for the produce, large commercial farmers who mainly depend upon hired labour are slowly either withdrawing from cottonseed production or opting for share-cropping arrangements with labouring families¹³. In recent years companies have received demands for higher procurement price from large growers in several places. This is one of the reasons for the seed companies to shift their production to new locations while preferring to contract their production to small farmers. The small farmers are less organised and have less bargaining power to negotiate for higher prices. This also has implications for the workforce composition in the cottonseed sector. Small farmers tend to depend more on their own family labour, including their children.

A clear indication of this shift from large to small holdings can be seen in the decline of the average size of cottonseed farms. Except Andhra Pradesh, in all other states a significant decline in land holding size occurred

¹³ 'Share-crop Contract between Migrant Workers & Farmers: Aajeevika-KAS's experience in Idar-Kotda' Aajeevika Bureau, 2010, [http://www.aajeevika.org/assets/pdfs/Takrar%20se%20Karar%20Tak%20\(Sharecropping%20Contract\).pdf](http://www.aajeevika.org/assets/pdfs/Takrar%20se%20Karar%20Tak%20(Sharecropping%20Contract).pdf)

since 2006-07. The average size of a cottonseed farm is lowest in Rajasthan followed by Gujarat and Tamil Nadu. During 2006 and 2014 the average size of a cottonseed farm declined by 60% in Gujarat (from 1.7 acres to 0.68 acres), 26.8% in Karnataka (from 1.12 acres to 0.82 acres) and 26.6 % in Tamil Nadu (from 0.94 acres to 0.69 acres). Table 7 presents an overview of the data on the size of cottonseed farms in different states. In Rajasthan and Gujarat, the production shift to small scale tribal farms has resulted in a large number of middlemen/sub organizers in tribal areas who mediate between farmers and company seed organizers. Company seed organizers are completely depending on these middlemen to recruit the farmers for production, release production advances and settle final payments. In recent years several reports have indicated that these middlemen are trying to exploit the farmers while settling the payments to them¹⁴.

Table 7: Average size of cottonseed farms in different states (in acres)

State	2006-07	2009-10	2014-15	% growth during 2006-2014
Andhra Pradesh	1.47	1.35	1.38	- 6.0%
Gujarat	1.7	0.87	0.68	-60.0%
Rajasthan			0.48	
Karnataka	1.12	0.86	0.82	-26.8%
Tamil Nadu	0.94	0.75	0.69	-26.6%

2.6 Changes in the workforce composition

The expansion and relocation of production into remote tribal locations and the decline in the average size of production units had significant consequences for the composition of the workforce. In the new production locations most of the seed growers are small and marginal farmers mostly depending on family labour. Here it is observed that the proportion of family labour, both adults and children, is relatively high compared to traditional seed production areas. As the new production locations are situated in labour supply zones, the need for seasonal migrant labourers reduced significantly. Most of the hired labourers in new production locations are local labourers.

Tables 8 and 9 present trends in the involvement of family labour and seasonal migrant workers in cottonseed production in the period 2006-2014. The data clearly indicate that across all states there is a steady growth in the proportion of family labour in the total workforce. The proportion of family labour to the total workforce in 2014-15 is highest in Rajasthan with 48.8%, followed by Gujarat with 36.8%. The proportion of family labour to the total workforce increased significantly since 2006-07 in Gujarat (from 17.6% in 2006-07 to 36.8% in 2014-15) and Tamil Nadu (from 14.7% in 2006-07 to 25.5% in 2014-15). The trends in employment of seasonal migrant workers clearly indicate that, except in Andhra Pradesh, there is a steady decline of seasonal migrant workers working on cottonseed farms since 2006. The decline is very large in Gujarat. The proportion of seasonal migrant workers to the total workforce declined from 83.4% in 2006-07 to 47.8% in 2014-15.

Table 8: Proportion of family labour to total workforce in cottonseed farms

State	2006-07	2009-10	2014-15
Andhra Pradesh	21.8%	29.3%	29.9%

¹⁴ The Dakshini Rajasthan Mazdoor Union which has been working against trafficking of children from Rajasthan to cottonseed fields in Gujarat received several complaints from tribal farmers that they were not paid properly and that they were cheated by company middlemen. Source: *Annual report 2014*, Dakshini Rajasthan Mazdoor Union, *Udaipur, India*: <http://www.indianet.nl/150120e.html>

Gujarat	17.6%	31.0%	36.8%
Karnataka	21.4%	25.4%	30.5%
Tamil Nadu	14.7%	22.2%	25.5%
Rajasthan	NA	NA	48.8%

Table 9: Proportion of seasonal migrant workers to the total labour supply

State	2006-07	2009-10	2014-15
Andhra Pradesh	17.4%	22.7%	30.4%
Gujarat	83.4%	54.3%	47.8%
Karnataka	7.5%	6.1%	8.3%
Tamil Nadu	82.8%	74.1%	67.2%
Rajasthan	NA	NA	5.3%

2.7 Summing up

To sum up, the recent developments in the cottonseed industry such as the increase in the production area, production shifting from large commercial farms to small family units, the expansion and relocation of production into remote tribal locations and the decline in the average size of production units had significant implications for the composition of the workforce and the nature and magnitude of child labour in the cottonseed industry. In the next section the incidence of child labour and profile of the children working on cottonseed farms in different states are presented.

CHAPTER III

MAGNITUDE AND PROFILE OF WORKING CHILDREN

3.1 Introduction

This chapter describes the magnitude and profile of the children working on cottonseed farms. In order to understand the trends in the employment of children on hybrid cottonseed production in different states, the results of the present study were compared with previous studies carried out by the same author in 2006-07 and 2009-10.

3.2 Magnitude of child labour

Table 10 presents data on the incidence of child labour during the 2014-15 crop season in 396 sample cottonseed farms in 72 villages that are producing seed for both MNCs and major Indian seed companies in six Indian states. Field visits to the farms were conducted during cross-pollination, the most labour intensive activity, which takes up approximately 90% of the total work days required for cottonseed production.

The data for 2014-15 shows that children under 14 years still account for nearly 25% of the total workforce in cottonseed farms in India. The occurrence of child labour varies between different states and regions within states. Tamil Nadu (19.2%) has the lowest incidence of child labour followed by Gujarat (21.5%). Andhra Pradesh, Karnataka and Rajasthan have the highest incidence of child labour, respectively 24.7%, 28.8% and 28.6% (see table 10).

Table 10: Incidence of child labour in cottonseed farms in different states during 2014-15

	Andhra Pradesh and Telangana	Gujarat	Karnataka	Tamil Nadu	Rajasthan
Total number of farms surveyed (area in acres)	116 (160.5)	120 (78)	60 (49.5)	60 (41.5)	60 (29)
Total number of workers engaged in cross-pollination activity	1376	854	455	369	301
% children (below 14 years) to total workforce	24.7% (340)	21.5% (184)	28.8% (131)	19.2% (71)	28.6% (86)
% children (15-18 age group) to total workforce	34.6% (477)	31.1% (266)	30.7% (140)	36.3% (134)	30.2% (91)
% adults (above 18 years) to total workforce	37.9% (521)	47.3% (404)	40.4% (184)	44.4% (164)	41.2% (124)
Average number of children (below 14 age) per acre	2.1	2.3	2.6	1.7	2.7
Average number of children (15-18) per acre	2.9	3.4	2.8	3.2	3.1

Note: figures between brackets are the absolute numbers

A total of 369 workers were found working on 60 sample farms during field visits in Tamil Nadu, out of which 19.2% (71) were children below 14 years. Children in the age group of 15-18 years accounted for 44.4%. The average number of children employed per acre is 1.7 children below 14 years and 3.2 children between 15-18 years.

Struggle to combine work with school : case studies of part time child workers

Sujatha, a 13 year old girl, is now studying in eight class. She goes to school only six to seven months in a year and the rest of the time she works in cottonseed fields. Due to this she is unable to cope with her studies and her school results are very weak. She says nearly 20% of the children in her class are like this who go to work during cottonseed season and rest of the time to school.

Sujatha has two brothers and one sister. Her family is primarily dependent on wage work . Her father is a drunkard and spends most of his earning on liquor. Her mother is the only full time working member in her family. In order to supplement the income and help her mother, Sujatha started working in the cottonseed fields. "if my father went to work regularly and give money to the family there is no need for me to go to work. I am really interested to go to school regularly. I don't know how long I can continue like this (both work and school). I may have to discontinue my school soon because I am very weak in studies and may not be promoted to higher class`.

Santilal Dhanpalbhai, a 13 year old boy, hails from a poor Adivasi family in a small village in Khedbrahma taluk in Sabarkantha district, Gujarat state. His family owns two acre of dry land and income they get from their land is insufficient to meet their expenses. Most part of the time his parents work as wage labourers. He is studying in 7th class in a local government school.

During the last three years the cottonseed growers in his village are encouraging school going children to take up cross-pollination work on cottonseed farms as a part time activity. The timings of cross-pollination activity are adjusted to suit to the school timings – in the morning three hours (6.00 am to 9.00 am) before school starts and in the evening two and half hours (4.00 pm to 6.30 pm) after the school.

In 2014, **Santilal** joined as a part-time worker with a cottonseed employer in his village and worked for two months during September and October months. He is paid Rs 50 as a daily wage for working five hours a day. The daily schedule of Santhilal during the cross-pollination period is very hectic. He wakes up at 5 am to get ready by 6 am to start work in the fields. He works in the cottonseed field till 9 am doing pollination work. He comes back home at 9.30 am, eats and then goes to school by 10 am. From 10 am to 3.30 pm he attends the classes. He goes to the farm again at 4.00 pm and works till 6.30 pm doing emasculation work. Though cottonseed work looks like a part-time activity for the children they actually work five to six hours and the time they actually spend in work is almost the same as they spend in school. This will have serious implications on school performance of the children and put pressure on them to slowly dropout from school and join the workforce.

In **Gujarat** the total number of sample farms covered by the survey is 120. Of the total 854 workers observed in cross-pollination activity on the sample farms 21.5% were children below 14 years and 31.1% were older children in the age group of 15-18 years. The average number of children employed per acre stands at 2.3 children below 14 years and 3.4 children between 15-18 years. Compared to new production locations the incidence of child labour was found low in traditional seed production locations like *Idar* and *Himmatnagar* taluks in *Sabarkantha* district and *Vijapur* and *Kheralu* taluks in *Mehsana* district. Earlier in these districts farmers were dependent on seasonal migrant labour. Due to the decrease in seasonal labour migration and the restrictions imposed by the Rajasthan and Gujarat governments on the movement of young migrant workers from Rajasthan to cottonseed

farms in Gujarat, less seasonal migrants, including children, are working in the traditional seed production locations.

In **Andhra Pradesh** which is now divided into two states, field work was conducted in two districts: Kurnool which is now part of Andhra Pradesh and Mahabubnagar which is part of newly created state of Telangana. The children below 14 years accounted for 24.7% of the total workforce in Andhra Pradesh and Telangana together. Both the per acre employment of children and the proportion of children to the total workforce was relatively high in Mahabubnagar district compared to Kurnool district. The proportion of children below 14 years accounted for 21.2% in Kurnool district where as it is 29.8% in Mahabubnagar district. The per acre employment of children below 14 years stands at 1.8 children in Kurnool district and 2.5 children in Mahabubnagar district.



Case study of a girl worker exposed to pesticide poisoning

Yadamma, a 14 year old girl, hails from a Dalit agricultural labour family in a remote village in Gattu Mandal in Mahabubnagar district of Andhra Pradesh. She has been working in the cottonseed fields for the last three years. She has two younger brothers and both of them are going to school. She also went to school for four years and discontinued after fourth class. Her father is lazy person and does not go for work

regularly. He also has a drinking habit and does not contribute his wages for the maintenance of family. Her mother alone looks after the family, also financially. When Yamma was nine years old and going to school her mother was overburdened with wage work, domestic and child care activities. She requested Yamma to discontinue her studies and help her in looking after young siblings (Yamma's brothers). After the children grew up and started going to school, Yamma started going for wage work.

Two years ago Yamma's mother took a loan of Rs 8000 from a cotton seed farmer pledging the labour of Yamma to meet the medical expenses because of the illness of her husband. Since then Yamma is working with the same employer. In the field she is entrusted with the tasks such as cross-pollination, sowing, weeding, harvesting and the application of fertilisers. Cross-pollination is the main activity she is involved in most of the time. During cross-pollination time she works about 10-12 hours a day and is paid a monthly wage of Rs. 4500

Yamma had a serious health problem during the last working season because of heavy exposure to pesticides sprayed in the fields where she was working. While doing the work in the field she got serious headaches and felt giddy. At some point she fainted and became unconscious. She was taken to the local doctor and given treatment.

Recalling the incident Yamma said that "I am very allergic to the pesticide smell. I do occasionally get headaches and feel giddiness whenever pesticides are sprayed in the field. In the past whenever I had these problems I used to complain to my employer. He used to suggest me to take rest for few hours under the tree in the field. But that day I had a severe headache which was not normal. We were four children working on that day. Due to heavy pest problem pesticides were sprayed in our field almost continuously with a five or six days gap. Because of the smell of pesticides two other children also had the same problem. When we complained to our employer he asked us to take rest. We were walking towards the tree. I felt giddy and fell down. I became unconscious. My employer informed my mother and both of them took me to the doctor. The doctor gave some injections and tablets. My employer paid part of money for my medicines. It took me about eight days to recover and go to work again."

The local doctor Mr. Malleth who treated Yamma reported that "it was a clear case of poisoning due to heavy inhalation of pesticides. I have treated her with `atropine` which is used for pesticide poisoning cases. I have also given three bottles of Glucose water (given through injection). I have advised her to take rest for four or five days. I have also advised her not get exposed to pesticides and take precautions such as not to do any work while pesticides are sprayed, cover the nose and mouth if she has to work in the field after spraying pesticides, properly wash her hands with soap after doing the work and before eating anything".

Compared to other states the incidence of child labour is high in **Karnataka** and **Rajasthan**. The proportion of children below 14 years accounted for 28.8% and 28.6% of the total workforce in Karnataka and Rajasthan. The average number of children below 14 years employed per acre stood at 2.6 children and 2.7 children in Karnataka and Rajasthan respectively.

3.3 Trends in the employment of child labour

Table 11 and 12 present the trends in the incidence of child labour in hybrid cottonseed production in different states since 2006-07. The recent trends indicate that there is an overall decline in the proportion of children to the total workforce as well as a decline in the average number of children employed per acre of cottonseed production in different states since 2006-07.

The proportion of children (below 14 years) to the total workforce declined with more than a third (from 32.7% to 21.5%) in Gujarat, with almost 50% (from 55.6% to 28.8%) in Karnataka, also with more than a third (from 42.7% to 27.4%) in Andhra Pradesh and almost 60% (from 46.2% to 19.2%) in Tamil Nadu during 2006-2014. The proportion of children (15-18 years) to the total workforce witnessed a marginal decline of 1-3% in different states during this period.

A similar trend was observed with regard to the average number of children employed per acre. During 2006-2014 the average number of children (below 14 years) employed per acre has been reduced by nearly 60.5% (from 4.3 to 1.7) in Tamil Nadu and 55.5% (from 5.9 to 2.6) in Karnataka. The decline in the average number of children per acre was 45.4% in Andhra Pradesh and 32.3% in Gujarat.

Table 11: Proportion of children (below 14 years) to the total workforce

	2006-07	2009-10	2014-15
Andhra Pradesh			
% total workforce	42.7 %	29.8%	24.7%
Average number of children employed per acre	4.4	2.6	2.1
Gujarat			
% total workforce	32.7%	24.6%	21.5%
Average number of children employed per acre	3.4	2.4	2.3
Karnataka			
% total workforce	55.6%	39.2%	28.8%
Average number of children employed per acre	5.9	4.0	2.6
Tamil Nadu			
% total workforce	46.3%	31.2%	19.2%
Average number of children employed per acre	4.3	3.1	1.7
Rajasthan			
% total workforce	NA	NA	28.6%
Average number of children employed per acre	NA	NA	2.7

Table 12: Proportion of children (15-18 years) to the total workforce

	2006-07	2009-10	2014-15
Andhra Pradesh			
% total workforce	34.8%	39.3%	34.6%
Average number of children employed per acre	3.6	3.5	2.9
Gujarat			
% total workforce	33.4%	34.4%	31.1%
Average number of children employed per acre	3.5	3.3	3.4
Karnataka			

% total workforce	33.9%	34.1%	30.7%
Average number of children employed per acre	3.6	3.4	2.8
Tamil Nadu			
% total workforce	34.8%	36.3%	32.6%
Average number of children employed per acre	3.4	3.2	3.0
Rajasthan			
% total workforce	NA	NA	30.2%
Average number of children employed per acre	NA	NA	3.1

3.4 Magnitude of child labour on farms producing for MNCs and Indian companies

The comparison of the magnitude of child labour between MNCs and Indian farms indicate that the situation is generally much better on MNC-related farms, in particular Bayer, Monsanto and DuPont which have implemented special programmes to address the issue of child labour. Since 2005-06 Monsanto and Bayer have been implementing several measures to address the problem of child labour on the farms directly producing seed for their companies. DuPont entered into the cottonseed business in India in 2009 and started its interventions against child labour from 2010. The action plans of these companies includes motivation campaigns, price incentives to the growers for not employing children, disincentives like black-listing of farmers who are found using child labour in their production and supporting special schools for the rehabilitation of former child workers. These initiatives have had a positive impact; the proportion of child labour to the total workforce on the farms producing seeds for these companies has dropped significantly.¹⁵

Compared to other MNCs and Indian companies, the incidence of child labour was found significantly lower on Bayer and Monsanto farms. During 2014-15, the proportion of children (below 14 years) to the total workforce on farms producing seed for these companies was found less than 2%¹⁶. The lowest incidence of child labour for both Bayer and Monsanto was found in Andhra Pradesh. DuPont's cottonseed production is mainly concentrated in Gujarat and Karnataka. The proportion of children (below 14 years) to the total workforce on DuPont farms accounted for 5.8% in Karnataka and 5.1% in Gujarat¹⁷. The situation of child labour on Mahyco farms (Monsanto's partner) was no different from several other companies who did not implement any serious measures to tackle the issue. The proportion of children (below 14 years) to the total workforce on Mahyco farms varied between 20.4% and 28.6% in different states.

¹⁵ For complete details of various measures initiated by Bayer and Monsanto for addressing the issue of child labour in their cottonseed production farms in India and its impact please refer to Venkateswarlu Davuluri (2007) 'Seeds of Change: Impact of interventions by Bayer and Monsanto on the elimination of child labour on farms producing hybrid cottonseed in India' (see: <http://www.indianet.nl/pb070608.html>). Also for a detailed account of Bayer's interventions 'Bayer CropScience in India (A): Against Child Labor' by Satyajeet Subramanian, Charles Dhanaraj and, Oana Branzei, Richard Ivey School of Business Foundation, 2011. Bayer and Monsanto are publishing every year the internal and external monitoring data on incidences of child labour in their cottonseed farms on their websites.

¹⁶ According to the internal monitoring data published by these companies on their websites the incidence child labour in terms of proportion of children to total workers for 2014-15 stand at less than 0.2% (0.014% on Bayer farms and 0.18% on Monsanto farms).

¹⁷ The internal monitoring data shared by DuPont shows the incidence child labour in terms of proportion of children to total workers monitored at 0.3% for 2014-15.

The leading Indian seed companies Kaveri, Nuziveedu, Ajit, Rassi and Bioseed, which control more than 50% of the total cottonseed production area in India, have acknowledged the child labour issue and initiated a few measures such as adding a no child labour clause in their contracts with seed farmers and organizing a few awareness raising meetings with growers to tackle the problem. All these companies are members of the ASI (Association of Seed Industry), now merged into the National Seed Association of India (NSAI), which has passed a resolution in their annual general body meeting in 2003 to proactively discourage direct and indirect (through its members) engagement of child labour in hybrid seed production. During 2003-05, ASI took some initiatives, in collaboration with other stakeholders, to eradicate child labour in the hybrid seed production areas.¹⁸ The efforts initiated by these leading Indian seed companies helped to raise awareness about the issue among farmers. However, they had a limited impact in reducing the magnitude of the problem as they lack systematic action plan for monitoring of the situation on the farms and rehabilitation of child workers. The proportion of children to the total workforce of Kaveri and Nuziveedu Seeds, the top two seed companies in India, varied between 16.4% and 32.6% in different states. The highest incidence of child labour on Kaveri and Nuziveedu farms was reported in Gujarat and Rajasthan and Mahabubnagar district of Telangana state and lowest in Kurnool district of Andhra Pradesh¹⁹. Unless the major seed companies like Nuziveedu, Kaveri, Raasi, Ankur, Ajit, Bioseed, Mahyco, Tulasi, Nath, JK Seeds, Vikram and Kushidhan which control more than 75% of cottonseed business in the country start taking effective measures against child labour, it remains difficult to address the problem at an industry level.

3.5 Profile of the working children

Girls outnumber boys

The gender composition of the working children on cottonseed farms shows that girls outnumber boys in all the states. They accounted for nearly 65% of the total working children (below 14 years) during 2014-15 (see table 13). Compared to Gujarat and Rajasthan, the proportion of girls among working children is relatively high in Karnataka and Andhra Pradesh. There is a marginal decline in the share of girls in working children in recent years particularly in the areas where family labour involvement is more common.

Hired labourers outnumber family labourers

Most of the working children in seed production farms are hired labourers. They constituted nearly 70% of the total working children in Andhra Pradesh, Tamil Nadu and Karnataka. Compared to other states the share of family children is relatively high in Rajasthan and Gujarat where they accounted for 53.2% and 37.5% of all children involved. The proportion of family children to the total number of working children has increased significantly in recent years in the areas where production has shifted from large commercial farms to small family farms.

¹⁸ For details see: Venkateswarlu, Davuluri (2004): 'Child labour in hybrid cottonseed production in Andhra Pradesh – Recent Developments', study commissioned by the India Committee of the Netherlands.

¹⁹ As part of another study, which is yet to be published, the research team visited a total of 706 cottonseed farms producing for Kaveri and Nuziveedu seed companies (320 Kaveri farms and 386 Nuziveedu farms) during 2014-15 cultivation season in Gujarat, Andhra Pradesh and Telangana states and interacted with adult and child workers engaged in cross-pollination activity in these farms. The magnitude of child labour and other observations found in this large sample study are broadly in line with the present study findings related to these companies.

Table 13: Profile of working children in cottonseed farms during 2014-15 season:

	Andhra Pradesh +Telangana	Gujarat	Karnataka	Rajasthan	Tamil Nadu
Total number of sample farms	116	120	60	60	60
Total number of children (below 14 years)	340	184	131	86	71
Family versus hired labour					
% of family labour to total labour	28.2% (96)	37.5% (69)	32.1% (42)	53.5% (46)	31.0% 22
% of hired labour to total labour	71.8% (244)	63.5% (115)	67.9% (89)	46.5% (40)	69.0% (49)
Gender composition					
% of boys to total children	30.6% (104)	43.5% (80)	28.2% (37)	39.3% (31)	36.6% (26)
% of girls to total children	69.4% (236)	56.5% (104)	71.8% (94)	60.7% (48)	63.4% (45)
Caste composition					
% of Scheduled Castes (SCs)	34.3% (92)	4.5% (6)	29.3% (27)	6.6% (4)	23.2% (13)
% of Scheduled Tribes (STs)	10.8% (29)	70.1% (94)	15.2% (14)	71.6% (43)	39.3% (22)
% of Backward castes	47.0% (126)	18.6% (25)	45.6% (42)	18.3% (11)	33.9% (19)
% of Other castes	7.8% (21)	6.7% (9)	9.8% (9)	3.3% (2)	3.8% (2)
School going status					
% of school dropouts	62.3% (167)	56.7% (76)	61.9% (57)	58.3% (35)	55.4% (31)
% of schoolgoing but working during peak season	28.7% (77)	34.3% (46)	23.9% (22)	30.0% (18)	33.9% (19)
% of schoolgoing but occasionally working during school holidays	8.9% (24)	8.9% (12)	14.2% (13)	11.7% (7)	10.7% (6)

Note: The school going status and caste background details are not available for all the working children. These details are available for 268 out of 340 children below 14 years in AP, in Gujarat for 134 out of 184 children, in Karnataka 92 out of 131 children, in Tamil Nadu 56 out of 71 children and in Rajasthan 60 out of 86 children.

Most of the working children are Dalits and Adivasi

The details on caste background of working children are available for 610 children. The data clearly indicate that most of the working children are from economically poor and socially backward communities like Dalits (also

called Scheduled Castes (SCs), Adivasi (also called Scheduled Tribes (STs) and Backward Classes (BCs). In Gujarat and Rajasthan more than 70% of the working children are from Adivasi communities. In Karnataka and Andhra Pradesh the largest number of working children are from BCs. Nearly 45% of the total working children in Andhra Pradesh and Karnataka are from BCs.

Educational status: Most of them are school dropouts

Most of the children found working on seed farms were school dropouts who are now working as a full time workers. They accounted for nearly 62% of the total working children in Andhra Pradesh and Karnataka. In other states the proportion of school dropout children varied between 55% and 58%. The category of children who go to school and temporarily drop out during the cross-pollination period accounted nearly 34% of the total working children in Gujarat and Tamil Nadu. In other states their number varies between 24% and 30%. The number of children who are temporarily dropping out



from school during the cross-pollination period has increased in recent years. The pressure on farmers to reduce the labour costs is leading to the adoption of new strategies to find cheap labour. In Tamil Nadu and parts of Karnataka and Gujarat it is observed that the farmers are encouraging schoolgoing children to take up cottonseed work as a part-time activity. Also the timings for cross-pollination activities are adjusted to the school timings.

News forms of child labour: employing children as part-time workers

The pressure on farmers to reduce the labour costs is leading to the adoption of new strategies to find cheap labour. The trend which began in Tamil Nadu in the mid-2000s has now spread to other states as well. In several parts of Karnataka, Gujarat and Tamil Nadu it is observed that the farmers are encouraging school going children to take up cottonseed work as a part-time activity. The cross-pollination period is adjusted to suit the school hours – three hours in the morning (6.00 am to 9.00 am) before school starts and two and half hours in the evening (4.00 pm to 6.30 pm) after school. Children are paid a nominal amount of Rs 50-60 per day for this work whereas the actual daily wage rate for adult workers is Rs 150- 180. Though it looks like a part-time activity, children actually work five to six hours and the time they spend working is the same amount of time they spend in school. This will have serious implications on school performance and slowly pressures them to drop out from schools and join the workforce. Over time many of the children become overwhelmed with both school and work and often drop out of school in order to continue working in the cottonseed fields.

CHAPTER IV

ESTIMATES OF THE TOTAL NUMBER OF CHILDREN EMPLOYED ON COTTONSEED FARMS IN DIFFERENT STATES

In the previous chapter, we presented the findings of the survey of sample cottonseed farms in different states. In the present chapter, an attempt is made to estimate the approximate total number of children employed in cottonseed production areas per state for the year 2014-15. The results are compared with the available data of the years 2009-10 and 2006-07. The estimates of the total number of children employed in cottonseed farms for the 2006-07 and 2009-10 for Andhra Pradesh, Gujarat, Tamil Nadu and Karnataka derive from previous studies published in 2007²⁰ and 2010²¹. The total number of child labourers in cottonseed production for the 2006-07 and 2009-10 years were estimated for each state separately on the basis of per acre average requirement of labour and the proportion of child labour to the total work force in the sampled farms. This was done by extrapolating the sample proportions to the total area under cottonseed production in different states. Using a similar methodology, the total number of children employed in cottonseed farms are estimated for 2014-15 for different states.

Table 14: Total area under hybrid cottonseed production in India

State	2006-07	2009-10	2014-15	% change 2006-07 to 2014-15
Andhra Pradesh	16,000	12,000	17,000	+1,000 (+6.2)
Gujarat	25,400	38,000	48,000	+22,900 (+91.2%)
Karnataka	5,000	8,000	11000	+6,000 (+120%)
Tamil Nadu	9,000	5,000	7,000	-2,000 (-22.2%)
Rajasthan	0.0	0.0	5,000	+5,000
Total	55,400	63,000	88,000	+ 32,600 (+58.8%)

The total production area is one of the determining factors of the magnitude of child workers involved in cottonseed production. Table 14 presents the data on the total area under cottonseed production for 2006-07, 2009-10 and 2014-15. The total area under cottonseed production in the surveyed states increased significantly by 58.8% since 2006-07 (from 55,400 in 2006-07 to 88,000 acres in 2014-15). Karnataka and Gujarat in particular, have witnessed a substantial increase in the area under cottonseed production (90% rise in Gujarat and 120% rise in Karnataka). The rise and fall of the total number of child labourers have - in addition to other factors like decreasing number of children per acre - to be understood in the context of changes in production area.

²⁰ Venkateswarlu, Davuluri (2007) 'Child bondage continues in Indian cotton supply chain' NETZ NRW ILRF. <http://www.dol.gov/ilab/programs/ocft/PDF/ilrf/ChildBondageContinuesinIndiaCottonSupplyChain.pdf>

²¹ Venkateswarlu, Davuluri (2010) 'Seeds of Child Labour - Signs of Hope: Child and Adult Labour in Vegetable Seed Production in India'.

Table 15: Estimates of the total number of children employed on hybrid cottonseed farms in different states in India for 2006-07, 2009-10 and 2014-15

State	2006-07		2009-10		2014-15		% change 2006-07 to 2014-15	
	Total children (below 14 years)	Total children (15-18 years)	Total children (below 14 years)	Total children (15-18 years)	Total children (below 14 years)	Total children (15-18 years)	Children below 14 years	Children 15-18 years
Andhra Pradesh	70,400	57,600	31,200	42,000	35,700	49,300	- 34700 (-49.3 %)	-8,300 (- 14.4%)
Gujarat	86,360	87,850	91,200	125,400	110,400	163,200	+25060 (+29.4%)	+75,350 (+85.8%)
Karnataka	29,500	18,000	32,000	27,200	28,600	30800	-900 (-3.0%)	+12,900 (+71.1%)
Tamil Nadu	38,700	27,000	15,500	17,000	11,900	22,400	- 26800 (-69.2%)	- 4,600 (-17.0%)
Rajasthan	0.0	0.0	0.0	0.0	13,500	15,500	+ 13500	+15,500
Total	224,960	190,450	169,900	211,600	200,100	281,200	-24,860 (-11.1%)	+ 90,750 (+ 47.6%)

Table 15 presents the estimates of the total number of children employed in hybrid cottonseed farms in Andhra Pradesh, Gujarat, Tamil Nadu and Karnataka in India for 2006-07, 2009-10 and 2014-15. Rajasthan is a new production location as there was no production in Rajasthan during 2009-10 and 2006-07.

Despite a significant increase in the production area with 59% the absolute number of children below 14 years employed in cottonseed farms in different states showed a marginal decline of 8.8% since 2006-07. The total number of children below 14 years employed in different states has come down from 224,960 in 2006-07 to 169,900 in 2009-10. However, between 2009-10 and 2014-15 this number increased again from 169,900 to 200,100. The children in the category of 15-18 years however, showed an increase of 47% since 2006-07 (from 190,450 in 2006-07 to 281,200 in 2014-15).

The state wise trends since 2006-07 on the incidence of child labour in cottonseed production is measured in terms of proportion of children to the total workforce and the average number of children employed per acre of cottonseed production showed a declining trend in all the states. The decline is significant in Andhra Pradesh, Tamil Nadu and Karnataka. However, this has not translated into a decline of the total number of children employed on cottonseed farms, particularly in Gujarat. This is due to a substantial increase in the production area in these states.

In Gujarat, though the proportion of children to the total workforce declined from 66% to 52.5% and the average number of children per acre from 6.9 persons to 5.7 persons, the total number of children employed increased from 174,210 to 273,600 between 2006-07 and 2014-15. This is mainly caused by the substantial increase in the total production area. The total area under cottonseed production In Gujarat increased with 90% since 2006-07.

Data on Andhra Pradesh and Tamil Nadu shows a significant decline in the total number of children employed in cottonseed farms since 2006-07. The total number of children employed has been reduced from 128,000 in 2006-07 to 90,100 in 2014-15 in Andhra Pradesh. In Tamil Nadu the number has been reduced from 65,700 in 2006-07 to 34,300 in 2014-15. The total number of children below 14 years dropped with 42% in Andhra Pradesh and 69% in Tamil Nadu. In the category of 15-18 years there was a 14% and 17% reduction in Andhra Pradesh and Tamil Nadu respectively.



CHAPTER V

INTERVENTIONS AGAINST CHILD LABOUR IN COTTONSEED CULTIVATION

The overall decline in the incidence of child labour per acre and also the total number of children particularly of the category of children below 14 years employed in cottonseed farms in several parts of the country can be attributed to interventions undertaken by different players - e.g. government, NGOs, seed industry, international agencies, social investors - to address the issue of child labour.

In Tamil Nadu the state government with the help of UNICEF has implemented a special project since 2009 to address the issue of child labour in Salem and Dharmapuri districts where cottonseed production is concentrated. The district level education and labour departments took active campaign against employment children with a special focus on cottonseed farms. The department of labour even gone to the extent of filing cases against farmers employing children and sending them to prison. The government appointed special teams to monitor the child labour situation in cottonseed farms. These teams inspected the few farms and rescued 22 children in 2013 and 43 children in 2014 and filed cases against farmers for employing children²². This has sent a strong signal to the farmers and many of them are now avoiding the employment of children.



In Andhra Pradesh the low incidence of child labour was reported in Kurnool district where local child rights groups, particularly MV foundation, are very active. Kurnool is also a district where UNICEF (with funding support from IKEA) in collaboration with local government and NGOs implemented a project to address the issue of child labour with a special focus on cottonseed sector. This is also an area where Bayer and Monsanto have substantial control over cottonseed production area and are addressing the child labour issue on their suppliers' farms. The large reduction in child labour in certain pockets of Kurnool

district was the result of combined efforts of MV Foundation, local government, UNICEF, civil society groups and seed companies. While the supply of children into labour market was largely reduced by the Social Mobilization spearheaded by MV Foundation, which has made very crucial efforts in mobilizing cross sections of the society, the demand for child labour by the farmers was controlled to a great extent by these companies. This has reinforcing effect both on the supply and demand for child labour. Children who were thus weaned out of work were either admitted into the schools or into the residential bridge courses.

²² <http://www.deccanchronicle.com/141017/nation-crime/article/43-child-workers-saved-bt-cotton-field>

MV Foundation: From Work to School

The contribution of MV Foundation (MVF)²³ to abolition of child labour in general and in cottonseed sector in particular is [significant](#). The exploitation of child labour in cottonseed fields and its link to multinational corporations was first brought into lime light in 1998 by [MVF](#) in Rangareddy district in the State of erstwhile Andhra Pradesh²⁴. With the support of local community MVF initiated an intensive process of social mobilisation against the employment of children and succeeded in removing large numbers of children from work and joined them in schools. Adult workers replaced child labour in cottonseed farms.

In 2004, MVF expanded its activities to Kurnool district which has a high concentration of production of hybrid cottonseeds. In collaboration with district administration in Kurnool, it launched a district wide campaign against child labour. Children engaged to work in cottonseed production received special attention .

During 2003-05 it collaborated with Association of Seed Industry (National association of the planting seed industry in India) and pressured the seed companies to prepare action plans for addressing the child labour issue in their suppliers' farms. In the following years government took up the agenda of monitoring employment of children in hybrid cottonseeds and MVF facilitated the same through community based organisations on child rights.

During 2011-14, a special project for elimination of child labour through community mobilization and implementation of RTE (Right to Education) Act was implemented in Dornipadu and Uyyalawada mandals with the support from 'Project Hope' of GEW²⁵. Intensive campaign was launched mobilising government machinery, village panchayat, cottonseed farmers, teachers, youth and other sections of the society against engaging children in any form of work including working on cottonseed farms. Due to its efforts, farmers stopped employing children and announced that their farms were 'child labour free'. Thus areas of 'child labour free zones' began to emerge with the elimination of all forms of child labour including those who were engaged in cottonseed farms in and around these two mandals. Hundreds and thousands of child labourers were withdrawn from work and sent to schools.

²³ MV Foundation, based in the state of Telangana, India, has done pioneering work on the issue of abolition of child labour and mainstreaming them into formal schools. MV Foundation works with the basic understanding that 'Any child out of school is a child labourer' and the only way to eliminate child labour is through full time formal education. As part of its overall strategy, MVF mobilises: parents, teachers, youth, employers, women's groups, elected representatives and the children themselves. This massive mobilisation effort is done with a view towards transforming attitudes and creating an environment that is supportive of children's education. Motivation centres have been established at villages which serve as the nerve centre to bring working children into school. Bridge courses, camps and residential programmes are conducted as part of a process to encourage children to attend schools. The success of the MVF model can be gauged by the fact that since 1991 up to now the Foundation has established a social norm in favour of children's right to education and against child labour in thousands of villages in the country. For further details see www.mvfindia.in

²⁴ The first study on the issue of child labour in cottonseed production was commissioned and published by MV Foundation in 1998.

²⁵ GEW is a German based teachers' trade union.

Due to active interest taken by the *National Commission for the Protection of Child Rights (NCPCR)*, campaigns from local NGOs and unions like DRMU and Seva Mandir in Gujarat and Rajasthan more actions are seen in recent years from the state governments in addressing the problem of child labour on cottonseed farms. Both the state governments have come out with resolutions dealing specifically with child trafficking to cottonseed plots. Gujarat and Rajasthan governments set up border check posts during the beginning of the cottonseed production season to stop the trafficking of children. The labour departments in these states undertook inspections of seed farms. Even though this official action and interventions by NGOs and unions had some positive impact, their interventions have not succeeded in fully addressing the issue. Especially the state governments of Gujarat and Rajasthan have not fulfilled their legal obligation to tackle the issue effectively. Though there is some reduction in inter-state child migration from Rajasthan to Gujarat, it has not controlled intra-state child migration effectively as well as the employment of children in family farms. In fact the employment of children on family farms has not received any serious attention from the state governments of Gujarat and Rajasthan.



Combating child labour and organizing workers in cottonseed production: DRMU Interventions in Gujarat and Rajasthan

The Centre for Labour Research and Action (CLRA), an NGO, along with its sister organization Dakshini Rajasthan Majdur Union, promotes workers' rights in the vast informal sector economy of India. It has worked extensively in the cotton supply chain, including cottonseeds. Its primary agenda is to organize workers into trade unions that can take up the struggle for decent wages and improved work conditions. CLRA and DRMU mobilized and organized workers in the cottonseed production and cotton ginning units of Gujarat.

In cottonseed farms, the Union was able to impose a blockade on movement of workers from the source areas forcing the employers to negotiate and grant higher wages. It documented the high incidence of child labour and undertook advocacy with the state leading to development of an anti-trafficking protocol. In cotton ginning units it has documented the high incidence of accidents, highlighting employment of children, and filing legal cases. Its work had led to reduction of child labor, the reduction of accidents and an increase in wages received by workers.

See also: <http://www.indianet.nl/150120e.html>

CHAPTER VI

WAGES RATES: THE ISSUE OF BELOW MINIMUM WAGES

4.1 Introduction

The Minimum Wages Act 1948 in India guarantees payment of minimum wages to workers in different sectors, including the agriculture sector²⁶. The power to fix and revise minimum wage rates for different agricultural activities has been given to the state governments²⁷. The wages under the Act may be for time work, known as a 'minimum time rate (daily wage rate)' or for piece work known as a 'minimum piece rate'. In spite of this legal requirement, below payment of minimum wages has long been an issue in the agriculture sector, especially in the hybrid seed production. It still is, mostly for women and children.

4.2 FLA-ICN wage study findings

A detailed study conducted by the Fair Labour Association (FLA) and India Committee of the Netherlands (ICN) in 2012²⁸ on the situation of wages in hybrid seed production in different states of India clearly indicates a significant variation in wage rates between different states, regions within a state, type of production activities, gender and the location and nature of labour arrangements. The key observations of the study are as follows:

- Regional variations in wage rates in the same state are present and wages are higher in regions that are relatively more developed. The average wages are substantially higher for tasks like ploughing, spraying pesticides and applying fertilizers than the wages for sowing, weeding, harvesting and cross-pollination. Division of work based on gender is a common phenomenon which has substantial earning implications for women and men engaged in various production activities. In particular women are preferred for cross-pollination, weeding and harvesting, which are labour-intensive and lower paid activities compared to ploughing, spraying pesticides and applying fertilizers, which are less labour-intensive, higher paid, and mostly done by men. Daily casual workers were paid more compared to seasonal labourers in all states for similar activities. Caste-based discrimination in wages was not reported in any of the locations.
- In general male workers are paid higher than the legal minimum wages for most of the activities in which they are involved. The average daily wages for ploughing and spraying pesticides, which are exclusively done by men, are 5% -65% higher than the legal minimum wages in different states. Women are not paid legal minimum wages for most activities, except cross-pollination, in some locations. The average daily wage rate women earn with sowing, weeding and harvesting is 5%-48% lower than the legal minimum wages in different states. The wage rates for children for all activities are below the legal minimum wages. Children earn 5%-50% less than the legal minimum wages in different states. Overall, there is non-compliance with regard to overtime compensation and paid rest days.
- The data on prevailing market wages in cottonseed farms for 2014-15 were collected for three states: Andhra Pradesh, Gujarat and Karnataka. In Andhra Pradesh the data were collected in two locations. One is *Gadwal* area in *Mahabubnagar* district which is now part of Telangana state, the second one is *Nandyala* area in

²⁶ The Minimum Wages Act, 1948 http://pblabour.gov.in/pdf/acts_rules/minimum_wages_act_1948.pdf

²⁷ According to act wage rates have to be revised at an interval not exceeding five years.

²⁸ Venkateswarlu, Davuluri and Jacob Kalle (2012) 'Wages of Inequality of inequality: Wage Discrimination and Underpayment in Hybrid Cotton and Vegetable Seed Production in India'.

Kurnool district which is part of Andhra Pradesh. In Gujarat the wages data was collected in two locations: *Idar* taluk in *Sabarkantha* district and *Bodoli* taluk in *Chotaudaipur* district. Compared to *Bodoli*, *Idar* is a relatively better developed area. In Karnataka the data were collected in one location, *Koppal* district.



4.3 Statutory minimum wages in different states

Table 16 presents a comparison of prevailing market wage rates for different activities in cottonseed production in Andhra Pradesh, Karnataka and Gujarat with statutory minimum wages prescribed by the respective state governments. The minimum wage rates for daily casual workers for agricultural activities prescribed by the respective state governments varied between Rs150 and Rs269. While Andhra Pradesh follows a zonal system for fixing wage rates, a uniform wage rate system is followed in Karnataka and Gujarat. The current legal minimum daily wage rate in Karnataka and Gujarat is Rs 269 and Rs 150 respectively. In Andhra Pradesh, the legal minimum daily wage rate is between Rs 159 and Rs 266 in different zones.

Regulation of cottonseed prices - impact on procurement prices and minimum wages

In India Bt cottonseed prices are regulated by the state governments. Currently there is a cap on maximum sale price of Bt cottonseeds. In 2006 The government of Andhra Pradesh capped the maximum sale price of BG1 (Bollgard I) at Rs 650 and BG II (Bollgard II) at Rs 750 for a packet of 450 gm of seed (inclusive of technology fee)²⁹. The other cotton growing states of India also followed Andhra Pradesh and adopted the same pricing. In 2011 there was a revision of prices by various state governments and the maximum sale price of Bt cottonseeds was hiked by 30% - for BG I variety from Rs 650 to 830 and for BG II variety Rs 750 to Rs 930. Since 2014 seed companies are requesting for revision these prices but not been able succeed. In June 2015, Maharashtra government in fact reduced the price by Rs 100 for 450 grams in view of the agrarian distress in the state. Since 2012 the cost of cottonseed production has increased significantly but the procurement prices paid by companies to seed farmers remained stagnant. The companies are arguing that they will not be able to increase procurement prices unless they are allowed to increase the sale price. Unless procurement prices are increased farmers will not be able to able to increase the wages and pay minimum wages to workers. There is a need for the governments for review of prices at frequent intervals keeping the changes in cost of cultivation.

The findings of the data analysis of the prevailing markets wages for 2014-15 are broadly in line with the findings of the ICN-FLA wages study in 2012. The average wages are substantially higher for tasks like ploughing and spraying pesticides which are predominantly done by men than the wages for sowing, weeding, harvesting and cross-pollination which are mostly done by women. Regional variation in wage rates are also observed. In Gujarat wage rates were relatively higher in Idar taluk in Sabarkantha district compared to Bodoli taluk in Chtoudaipur district which is a relatively backward region. No significant differences in wages were found between the farms that are producing seeds for national and multinational companies.

4.4 Comparison of statutory wages with prevailing market wages

A comparison of prevailing market wages with the statutory minimum wages fixed by the respective state governments clearly indicates that the legal norms are not followed, especially for certain categories of workers and activities. Except ploughing and pesticide application which are almost exclusively done by men, the prevailing market wages for all other activities are below the legal minimum wages. The prevailing wage rates for cross-pollination activity which is the vital activity in seed production, are 46.5% below the legal minimum

²⁹The monopoly control over Bt technology by MMB has led to exorbitant pricing of Bt cotton hybrids which were in the initial years (2003-05) priced between Rs 1600-1800 for 450 gms of Bt hybrids , as against Rs 400-450 for non-Bt hybrid seeds. MMB dominated the market for cotton hybrids, either directly through selling hybrid seeds or indirectly through sub-licensing to private seed companies till 2006. The domestic companies who licensed Bt trait from MMB were required to pay a one-time license fee as well as royalty fee on every packet of seed sold in the market. Until 2006, the price for official Bt cottonseeds in India was around Rs 1600 per packet of 450 grams. Out of this, Rs 1250 was charged by MMB as the trait value. Due to pressure from various farmer and civil society organizations the state of Andhra Pradesh imposed certain regulations targeted to control Bt cottonseed prices, so as to make the technology affordable and accessible to small and marginal farmers in the state. In January 2006, the government of Andhra Pradesh filed a case with the Monopolistic and Restrictive Trade Practices Commission (MRTPC) against MMB for indulging in monopolistic trade practices with unreasonably high prices and limited technical developments. MRTPC gave a ruling against MMB and asked it to rework on pricing of Bt. cottonseeds.

Bayer's interventions to ensure minimum wages to workers

The issue of non-payment of minimum wages to workers in contracted cottonseed production farms has not received any serious attention from seed companies. The only company which has initiated some steps to address the problem of below minimum wages in cottonseed sector is Bayer. Syngenta also initiated some measures to address the minimum wages issue but it is not involved in cottonseed business.

Bayer has acknowledged the issue and initiated some measures to address the problem. In collaboration with the FLA, Bayer has organized a workshop in 2010 with stakeholders (NGOs, government officials, seed organizers, growers and workers) in Hyderabad where the issue of minimum wages was discussed. Lack of awareness about the Minimum Wages Act among seed organizers, growers, workers and company field staff has been recognized by the company and steps have been initiated to create awareness among them. Growers normally do not maintain any records regarding worker contracts and wage payments. Absence of records makes it difficult for the companies to track wage payments to workers at farm level. The need for documentation of workers attendance and wage payments has been recognized and steps have been taken to motivate the growers to maintain wage records. Growers have been given separate books for recording workers attendance and wages paid to them. Bayer is paying a small bonus (about 3% of the procurement rate) to growers to encourage them to pay minimum wages to workers.

The interactions with growers and workers and review of the documentation related to wage payments at farms producing for Bayer shows that the steps taken by Bayer helped to create awareness about minimum wages particularly among growers and promote the habit of maintain records among some growers. However, none of these interventions ensured the payment of minimum wages to workers. Comparison of prevailing wages rates in Bayer with that of other companies in Karnataka where company is implementing minimum wage project on pilot basis indicates that there is not much difference in wage rates between Bayer and other companies' farms as the wage are almost the same. The minimum wage rate for cross-pollination is Rs 269 in Karnataka. The wage rate paid by the farmers for cross-pollination in Chintamani area of Karnataka where Bayer is implementing its minimum wages project is Rs 168.5, which is still 37.4% below the legal minimum wage. The cost of production, yields and net income details for 2014-15 collected from farmers in Karnataka indicate that after meeting all the production expenses they had only 10-12% profit margin. If farmers have to pay minimum wages to workers the cost of production would rise by nearly 20%. With the current procurement prices and crop yields the farmers would be left with no margins if they had to pay minimum wages to the workers.

As a first step in the direction of implementing minimum wages companies needs to have a proper review of their procurement policies and ensure that growers have enough margins to pay minimum wages to workers. Given the gap between prevailing wages rates and legal minimum wages the rise in procurement price is required to meet the additional expenses. This is not to suggest that once procurement price is increased the problem will be automatically resolved and farmers will pay minimum wages to the labourers. The price issue at least can address a part of the whole problem and other interventions will be more effective once it is resolved.

wage in Karnataka, 9.4% below in Andhra Pradesh, 25% below in Telangana and 6.6% to 16.6% below in different locations in Gujarat.

Table 16: Comparison of prevailing market wages with statutory minimum wages 2014-15

Activity	Andhra Pradesh*		Karnataka		Gujarat	
	Statutory minimum wages	Prevailing market wages	Statutory minimum wages (Rs)	Prevailing market wages	Statutory minimum wages	Prevailing market wages
Ploughing	Zone 2- 175 Zone 3- 159	Zone 2-237.5 Zone 3-195.8	269.04	192.5	150.0	159.5 in Bodoli and 184.3 in Idar
Sowing	Zone 2- 186 Zone 3- 159	Zone 2-137.5 Zone 3-115 l	269.04	125.0	150.0	116.2 in Bodoli and 134.6 in Idar
Weeding	Zone 2- 186 Zone 3- 159	Zone 2-137.5 Zone 3-115	269.04	120.0	150.0	114.2 in Bodoli and 132.6 in Idar
Pesticide application	Zone 2- 234 Zone 3- 213	Zone 2-258.3 Zone 3-212.5	269.04	212.5	150.0	184.5 in Bodoli and 204.2 Idar
Cross-pollination	Zone 2- 234 Zone 3- 213	Zone 2- 212.5 Zone 3-175.0	269.04	144.6	150.0	125 in Bodoli and 140 in Idar
Harvesting	Zone 2- 186 Zone 3- 159	Zone 2-156.5 Zone 3-137.5	269.04	134.5	150.0	116.2 in Bodoli and 139.6 in Idar

Note: In Andhra Pradesh wage data was collected in two locations: 1) Gadwal area in Mahabubnagar district which is now part of Telangana state. The villages where field work was conducted in this location fall under Zone three as per minimum wages notification. 2) Nandyala area in Kurnool district which is part of Andhra Pradesh. This location comes under Zone three. In Gujarat the wages data is collected in two locations. Idar taluk in Sabarkantha district and Bodoli taluk in Chotaudaipur district. Compared to Bodoli, Idar is a relatively better developed area. In Karnataka the data was collected in one location, Koppal district.

Higher procurement prices lead to increase in wages and decrease in child labour

An analysis of the trends in wages and procurement prices in the cottonseed sector indicates that there is a link between them. A recent study on trends in wage rates and procurement prices in cottonseed producing locations in Andhra Pradesh during 2004-13 showed that higher procurement prices for cottonseed led to an increase in wage rates and a decrease in child labour. The study noted that the rise in procurement prices during 2010-12 enabled the growers to increase the wages to attract more and more adults to join the workforce.

The average daily wages for adult female worker for cross-pollination in cottonseed in Andhra Pradesh rose almost 3.3 times during 2004-13. The wages have increased at a pace much faster than inflation³⁰. The increase in real wages in cottonseed farms has been attributed to many factors including the rise in procurement prices. An analysis of the trends in wages and procurement prices indicates that there is a link between them. Although a combination of factors contributed to the overall increase in wages since 2004-05, the sharp increase in wages during 2010-13, can be largely attributed to the significant increase in the procurement prices paid to farmers by the seed companies. During 2010-13 the wages in cottonseed production grow by 73.1% which is significantly higher compared to general wage increase in other crops during this period. During the same period there was an increase of 48.5% in procurement prices paid to the farmers by the companies (18% in 2010-11, 19.6% in 2011-12 and 5.1% in 2012-13). The sharp rise in procurement prices during 2010-

³⁰ The Consumer Price Index numbers for agricultural labourers rose by 100.6% during 2004-13 while wages in cottonseed production rose by 331% during this period.

13 had a positive impact on wages. It has encouraged the farmers to increase the area under cottonseed production creating additional demand for labour in a market which is already facing labour shortages. This led has to an increase in demand for labour and pushed up wages.

Source: *'The price of less child labour and higher wages: assessing the link between farm wages and procurement prices in Bt. cottonseed production in Andhra Pradesh, India,'* by Davuluri Venkateswarlu: <http://www.indianet.nl/pdf/ThePriceOfLessChildLabourAndHigherWages.pdf>



CHAPTER VII

SUMMARY AND CONCLUDING REMARKS

The use of child labour in the production of hybrid cottonseeds in India has been widely reported and documented since the report 'Seeds of Bondage' was published in 2001. Though the use of child labour is prevalent in many industries in India, probably no other industry has since then been so systematically scrutinized on child labour, and later wages paid, as the cottonseed industry. An important reason for that is the very high prevalence of child labour and the staggering number of child labourers, probably surpassing many other industries. Another reason is the substantial presence of large multinational companies that often have a no-child labour policy while their host governments expect from them to abide by the OECD Guidelines for Multinational Companies which include a no-child labour clause. Despite of this the issue of child labour in the cottonseed industry, as well as that of below minimum wages – especially for women – has been far from solved, though progress has been made by a number of companies. These include mainly multinational companies, but also some Indian companies have come forward to address the child labour with their supplying farmers.

Child labour

The recent figures regarding the magnitude of child labour, measured in terms of proportion of children to the total workforce and the average number of children employed per acre, in hybrid cottonseed production in India show a declining trend in all the states. The decline is significant in Andhra Pradesh, Tamil Nadu and Karnataka. However, this has not translated into a decline of the total number of children employed on cottonseed farms, particularly in Gujarat. The latter is due to a substantial increase in the production area in these states. As a result of the efforts of local and international NGOs, the government, media and social investors, awareness has been created. Interventions by various agencies, including governmental agencies, the National Commission for Protection of Child Rights, NGOs like MV Foundation and a union like DRMU, the seed industry and international organisations like ILO, UNICEF and UNDP have in combination had a positive impact and helped to reduce child labour in the cottonseed industry. The India Committee of the Netherlands (ICN), International Labour Rights Forum (ILRF) and the Stop Child Labour coalition have – through its range of reports on the issue and engagement with companies – triggered and supported these efforts by putting 'the facts on the table', seeking public attention and encouraging companies to take action.

Despite the decline, the total number of children still employed in the cottonseed sector is huge. The data for 2014-15 shows that children under 14 years still account for nearly 25% of the total workforce in cottonseed farms in India. In 2014-15, a total of around 200,000 children below 14 years were employed in cottonseed farms in Andhra Pradesh, Telangana, Gujarat, Tamil Nadu, Karnataka and Rajasthan states which account for more than 90% of the total production area in the country. Gujarat, which has the largest cottonseed production area in the country accounts for nearly 55% of the total children employed in this sector. The persistence of child labour on a large scale is due to the limited coverage and insufficient impact of the present interventions. This is even more the case for adolescent children. There are now 281,200 children between 15 and 18 years working in the cottonseed fields while this number was 190,450 in 2006-07. This is an increase by almost half.

The response of some of the state governments to address the problem of child labour in this sector has not been very encouraging. The government of Gujarat and Rajasthan, except initiating a few steps to control the trafficking of children from Rajasthan to Gujarat cottonseed fields, have not paid serious attention to tackle the issue. They are in a 'denying mood' about the existence of large number child labourers in this sector. In fact the employment of children on family farms, which has increased recently, has not received any serious attention from the state governments of Gujarat and Rajasthan.

There is a misconception, which is propagated by government and some seed companies, that most of the working children in seed production are family labourers who help their parents during school holidays and before and after school hours. This is not correct. Though there is an increase in the composition of family children in total workforce in recent years, they still constitute a small portion of total working children. In 2014-15, family children accounted for less than 30% of the total working children in Andhra Pradesh, Tamil Nadu and Karnataka. Compared to other states the share of family children is relatively high in Rajasthan and Gujarat where they accounted for 53.2% and 37.5% of all children involved. Also the study noted that most of the children working on seed farms were school dropouts who have discontinued their schooling and are now working as a full time workers. They accounted for nearly 62% of the total working children in Andhra Pradesh and Karnataka. In other states the proportion of school dropout children varied between 55% and 58%. The category of children who go to school and temporarily drop out during the cross-pollination period accounted nearly 34% of the total working children in Gujarat and Tamil Nadu.

The response from the seed industry as a whole to address the problem of child labour has not been very encouraging. Despite acknowledging the problem and promising steps to address the problem of child labour, seed companies, except for a few multinationals and local companies, to date have not taken any serious efforts to tackle the issue on the farms that are producing seed for their companies. The initiatives undertaken by Bayer, Monsanto, DuPont and few local companies have had some positive impact in reducing the number of working children. However, their efforts have only a limited impact on the overall magnitude of child labour in the industry. These efforts are nonetheless important, as they pave the way for broader initiatives and show that tackling child labour in the cottonseed industry is possible and has positive effects on both children and adult workers as the latter are better able to bargain for higher wages. It is therefore very important that individual companies continue to maintain and increase progress with regard to eliminating child labour in their individual supply chains. However, unless all the major seed companies come forward and implement serious measures in collaboration with other stakeholders, it is difficult to combat the overall problem of child labour.

The Right to Education Act 2010 that guarantees children free and compulsory education from the age of 6 to 14 years. The previous central government led by Congress party proposed to bring substantial amendments to The Child Labour (Prohibition and Regulation) Act 1986 to make it compatible with the Right to Education Act. The amendments include a total ban on employment of children below 14 years in all forms of work excluding involvement of children in family occupations after school hours and holidays and the prohibition of employment of adolescents aged 14-18 years in hazardous occupations. A bill was introduced in the parliament in 2012 (Child Labour Prohibition and Regulation Bill, 2012) which is pending for approval by the parliament. The new government led by BJP (Bharatiya Janata Party) which came to power in 2014 proposed some fresh amendments in May 2015 and is planning to put this pending bill again before parliament for its approval. Though this a welcome step, allowing children below 14 years to work in family enterprises during school holidays and non-schooling hours will have adverse impact, particularly in the cottonseed sector, and push more and more children to join the work³¹.

Below minimum wages

The other issue of major concern in cottonseed production discussed in this report is payment of minimum wages to workers. The Indian laws guarantee payment of minimum wages to workers in different sectors, including the agriculture sector. In spite of this legal requirement, below payment of minimum wages has long been a serious

³¹ 'Child labour amendment bill to push more kids into working' Times of India, June 14, 2015 <http://timesofindia.indiatimes.com/india/Child-labour-amendment-bill-to-push-more-kids-into-working/articleshow/47667566.cms>

issue in the agriculture sector, especially in the hybrid seed production. Unfortunately it still is a serious issue, mostly for women and children.

A comparison of prevailing market wages with the statutory minimum wages fixed by the respective state governments clearly indicates that the legal norms are not followed, especially for certain categories of workers and activities. The prevailing wage rates for cross-pollination activity which is the vital activity in seed production, are 46.5% below the legal minimum wage in Karnataka, 9.4% to 25% below the legal minimum wage in Andhra Pradesh and 6.6% to 16.6% below the legal minimum wage in Gujarat.

The minimum wages issue has not received as much attention as child labour and no serious efforts were made to tackle this issue either by the government, the seed industry or by civil society organizations, except the work by the union DRMU in Gujarat. In many states, the Minimum Wages Act is not implemented properly in the agricultural sector. Moreover, there is lack of awareness about the Minimum Wage Act among workers and farmers. The workers in cottonseed production are not well organized and there are no active worker organizations operating in most of the areas.

An analysis of recent trends in wages and procurement prices in cottonseed production indicates that there is a link between procurement prices received by the farmers and wages paid to workers. There are multiple factors that determine the wages paid to workers in seed production. Procurement price is one of the contributing factors that determine wages. The cost of production, yields and net income details for 2014-15 collected from farmers in Karnataka indicate that after meeting all the production expenses they are left with profit margin of less than 10%. Given the gap between prevailing wages rates and legal minimum wages, if farmers pay minimum wages to workers the cost of production would rise significantly. With the current procurement prices and crop yields the farmers would be left with no or a negative margins if they had to pay minimum wages to the workers.

As a first step in the direction of implementing minimum wages companies need to have a proper review of their procurement policies and ensure that growers have enough margins to pay minimum wages to workers. Since 2012 the cost of cottonseed production has increased significantly but the procurement prices paid by companies to seed farmers remained stagnant. Due to government regulation on cottonseed prices, currently the seed companies are constrained to increase the procurement prices. The companies are arguing that they will not be able to increase procurement prices unless they are allowed to increase the sale price. Unless procurement prices are increased farmers will not be able to increase the wages and pay minimum wages to workers. There is a need for the state governments to solve these interlinked problems in combination by – at frequent intervals – reviewing the sales prices of companies, their procurement prices and the wages that are paid to the agricultural labourers taking into consideration the changes in cost of production of seeds, the costs of cultivation by farmers and the needs for decent wages by agricultural labourers. The present minimum wages might not be enough to be considered a decent or living wage. This should also be investigated and if needed corrected by the respective state governments.

CHAPTER VIII

RECOMMENDATIONS

1. On the basis of the due diligence required by the universally accepted UN Guiding Principles for Business and Human Rights in the full supply chain of companies, both multinational and Indian companies have to systematically tackle labour rights violations on their suppliers farms, including child labour and below official minimum and/or living wages. In order to demand from farmers that they should not employ child labour and pay at least minimum wages, seed companies need to do a proper review of their procurement policies and ensure that growers have enough margins to do this.
2. Multinational Companies (MNCs) have to take responsibility to ensure that also their local business partners adhere to nationally and internationally defined labour rights, including with respect to combating labour rights violations like child labour and below minimum wages.
3. As Monsanto plays a very important role in Indian agriculture, including by joining up with Indian partner Mahyco and receiving royalties on its Bt seeds from many India-based companies, it has the responsibility to ensure that all companies that they have a business relation with tackle child labour in cottonseed production and respect labour rights.
4. As several companies have set up effective programmes against child labour in areas where are operating, it is advised to pool the knowledge gained for those companies that still have to start with this task or are grappling with the way to do this effectively. Where-ever possible an area-based approach to tackle child labour and get working children into quality formal education is to preferred. E.g. the NGO MV Foundation has effectively spearheaded such an approach, including in cottonseed production areas.
5. As cultivation shifts to small tribal farms, the deployment of children increasingly changes from one of migrant child labour to local family labour. The seed industry should not hide behind local legislation that may permit child labour on family farms. Present legislation might allow child labour before and after school hours. However the working hours in cottonseed plots means that child working on the cotton plots will at some point miss out on school and become a dropout.
6. Mostly women and children do not receive at least a minimum wage for their work because of gender-related allocation to certain types of work – like cross-pollination – that do not lead to paying the official minimum wage for an 8-hour day. This needs to be amended by government action. It also has to be studied if the present minimum wages are actually living wages that allow cottonseed workers a decent life. Cottonseed workers should also be covered under social security benefits like the Provident Fund.
7. According to Indian laws and the mentioned UN Guiding Principles, to which also India has subscribed, the central and state governments of India, as well as their designated agencies, have the ‘duty to protect’ the rights of both children and adults whose rights are violated on cottonseed farms. Looking at the magnitude and seriousness of the violations in cottonseed production, a special taskforce of state governments to ensure labour rights in this sector would be recommended. Such a taskforce should work in close co-operation with local groups, village panchayats, local (child) rights groups, NGOs and unions.

8. The National Seed Association of India (NSAI) should play a more proactive role in urging their members to combat child labour and respect labour rights, including by setting up joint programmes and requiring from members to report on progress.

9. Every Indian or multinational seed company, as well as the NSAI, should have an effective grievance mechanism where both farmers and agricultural labourers can safely file grievances on e.g. insufficient procurement prices and violations of labour rights at the farm level and resolve those issues. In cases of systemic violations programmes to tackle these have to be developed.

10. Due to government regulation on cottonseed prices, seed companies are hesitant to increase the procurement prices to farmers. There is a need for state governments to solve the interlinked problems of (maximum) sales prices, procurement prices and wages, by reviewing these from time to time. This has to take into consideration the changes in cost of production of seeds, the costs of cultivation by farmers and the needs for decent wages by agricultural labourers.

11. As the role of civil society - including local groups, NGOs and unions - in tackling child labour and labour rights violations in cottonseed production, support for organizations that have shown to be effective 'change agents' is recommended. It is also crucial that have the freedom to organize, mobilize and give their opinion as is guaranteed by the Indian Constitution and Indian laws. Any infringement on these rights by vested interest groups should be countered by democratic means.

