



Sustainability Challenges of Fast Fashion: Environmental and Social Impacts of Cotton Growing and the Ready-Made Garment Industry in Turkey

Elif Oral*

oralelif@gmail.com

TOBB University of Economics and Technology

Abstract

Turkey is one of the main actors of the global ready-made garment manufacturing industry both as a crucial country for organic and conventional cotton cultivation and as an exporter of yarn, fabric, textile, and RMG. Being a developing country, Turkey benefits from agricultural and industrial activities as they create employment opportunities and boost the national economy and development. On the other hand, Turkey also struggles to cope with the costs of this economic growth, such as the adverse impacts on the environment and human rights. In fact, except for certain legal loopholes, Turkish labour law and relevant legislation on environmental protection are mostly harmonised with the EU standards. Therefore, the main problems, such as unregistered foremanship, unregistered employment, informal workshops, and undeclared subcontracting seem to stem from the loose enforcement of these laws due to the deficiencies in the legal system in general. Other reasons that prove to create challenges for an effective implementation and enforcement of laws include: firstly, social realities, such as an increase in population, as a result of the high birth rates, rural-urban migration, and refugee influx, which is followed by high unemployment rates; secondly, economic constraints, such as a competitive labour market, market economy, and expensive eco-friendly technology; and, finally, structural obstacles, such as the lack of advanced irrigation systems and drainage canals, all of which are examined in this study in relation to cotton cultivation and the RMG industry.

Keywords: Cotton; RMG Industry; Sustainability; Environmental Law; Labour Law.

Introduction

T-shirt and jeans...that's all you need to go out and have coffee with friends.

And that T-shirt from the 2017-2018 Spring/Summer season may cost you less than

* Elif Oral, PhD, is an Assistant Professor in Public International Law at TOBB University of Economics and Technology, Ankara, Turkey. Business and Human Rights is one of her research interests. Submission date of the article is 6 March 2018; therefore, later legal developments are not covered. All views and opinions, except the ones expressed by the interviewees, belong solely to the author and should not be attributed to any other person or institution.

the coffee.¹ But, how much does it actually cost for the environment? Or, how many workers cannot enjoy that coffee, because they are paid under the minimum wage or work overtime? Fast fashion requires speedy and cheap labour for the manufacturing of ready-made garments (RMG) with a short product-life.² Fashion brands, marketing their latest trend products in high streets, seek to maximise their profit and lower their costs by outsourcing. However, the global outsourcing of cotton growing and manufacturing to the ‘developing’ countries, while contributing to the economic development of these countries and creating employment opportunities, also results in the outsourcing of environmental and social adverse impacts of the production processes.

Turkey is one of the major global actors of the textile and RMG industry, where fashion brands outsource cotton growing and manufacturing. It is listed as the world’s third largest organic cotton producer having a share of 6,49 per cent in the total production,³ and ranks amongst the top-ten conventional cotton producing countries.⁴ In 2017, the total export of textile and raw materials reached US\$8 billion and the export of RMG and confection reached US\$17 billion.⁵ These industries also create employment opportunities for many in the country. According to a household interview survey on employment, at least⁶ 619,000 people work in

¹ The coffee plantation and its adverse impacts on environment and human rights is the subject of another study.

² Nebahat Tokatli,[*et.,al*] ‘The Clothing Industry in Istanbul in the Era of Globalisation and Fast Fashion’ (2011) 48 *Urban Studies*. [1204].

³ Organic cotton is produced in nineteen countries, while 92,16 per cent of the total world production belongs to five countries, including Turkey. Textile Exchange, ‘Organic Cotton Market Report (2016)’ (*Textileexchange.org*, 2016). [32].

⁴ Having said that, as of 2017, only 2 per cent of Turkey’s overall cotton production was organic, and only 5 per cent was certified as “better cotton”.

⁵ Assembly of Turkish Exporters, ‘Annual Export Report (2017)’ (*tim.org*, 2017) <www.tim.org.tr/ihracat-rakamlari.html> accessed 4 February 2018.

⁶ The statistics of the Ministry of Labour and Social Security demonstrate that there are 1,005,855 registered workers in the textile industry as of July 2017. Ministry of Labour and Social Security, ‘National Employment Strategy 2014-2023’ (*Ministry of Labour and Social Security*, 2017) <<http://www.uis.gov.tr/media/1479/eylemler.pdf>> accessed 1 July 2017. The most active trade union in the sector Türkiye Tekstil, Örne, Giyim ve Deri Sanayii İşçileri Sendikası-(TEKSİF)-claims that there are two million unregistered workers in the textile and RMG industry. TEKSİF, ‘The Problems of the Sector’ (*TEKSİF*, 2018) <http://www.teksif.org.tr/sektorun-sorunlari_skb_11.html> accessed 15 February 2018.. See the same conclusion in Ercan Etki, *Tekstil Sektörü Raporu (Report on the Textile Industry)* (TC Doğu Marmara Kalkınma Ajansı Düzce Yatırım Destek 2013). [12].

the textile industry, while this number is 797,000 for the RMG industry, embodying 5,8 per cent of the total workforce on average, including the unregistered workers.⁷

However, the total production of organic – and conventional – cotton dropped significantly in the marketing year of 2016-2017, due to the political and social circumstances,⁸ plus the overall situation of the organic cotton market.⁹ Therefore, Turkey imported organic cotton from countries such as the USA, Greece, and Kyrgyzstan for a lower cost.¹⁰ Nevertheless, there is an expectation that the organic and conventional cotton production in Turkey will increase by 15 per cent in the marketing year of 2017-2018.¹¹

In this study, I will attempt to appraise the real cost of cotton-growing and manufacturing of RMG in Turkey by identifying the legal hotspots and social, economic, and structural deficiencies in the process. In doing so, I will firstly draw a general picture of the legal framework in Turkey with references to international law. Then, following the methodology of the New Chicago School,¹² I will focus on the practical implications of legal regulations, and the challenges and constraints before their effective enforcement. For this purpose, I will spot a light on the relevant social norms, market rules, and structural disadvantages for ecological and social sustainability in cotton growing and the RMG industry. In this research, I benefitted

⁷ The statistics are based on the 2013 household interview survey of the Turkish Statistical Institute, the employment data concerning the years 2009-2013 and the statistics of the Social Security Institute. Ministry of Labour and Social Security, 'National Employment Strategy First Workshop Report, Textile and Ready-Made Garment Industries' (*Ministry of Labour and Social Security*, 2016) <www.uis.gov.tr/announcements/19102016/> accessed 6 February 2018.

⁸ Organic – and conventional – cotton fields are located in the Aegean Region, Cukurova Region and mostly in the South-eastern Anatolia Region, which has the largest share in total national cotton production, due to the low-cost production possibilities and the governmental support (the South-eastern Anatolian Project - GAP) together with the Organic Agricultural Cluster Project being carried out in cooperation with the UNDP.

⁹ According to the Turkish Statistical Institute, the total (raw) cotton production in 2016 was 2,100,000 tonnes, 77,999 tonnes of which qualified as better cotton. In 2017, the amount of BCI certified cotton increased to 108,119 tonnes. Textile Exchange (n 3).[58].

¹⁰ There is a remarkable trend of shift of organic cotton production from Turkey to Central Asia. For example, it is observed that Turkey imports cotton from nearby countries such as Kyrgyzstan, where the landowners and the cotton producers are working for Turkish companies. Interview with Ms. Selin Işlakça, Textile Department Client Representative, ControlUnion (Izmir 2 November 2017). See also Textile Exchange, *Organic Cotton Market Report* (2017)[30-32].

¹¹ Ibrahim Sirtioğlu, *Turkey Cotton and Products Annual Report, USDA Foreign Agricultural Service, Global Agricultural Information Network (GAIN) Report No TR 7010*. [3].

¹² Lawrence Lessig, 'The New Chicago School' (1998) 27 *The Journal of Legal Studies*. [661].

mostly from the interviews I conducted within the context of the EU Sustainable Market Actors for Responsible Trade (SMART) Project with a cotton farmer, a denim mill, a certifying agency for organic products: Control Union, the Turkish branch of the Better Cotton Initiative (BCI)-İyi Pamuk Uygulamaları Derneği (IPUD)- and the General Directorate of State Hydraulic Works. In addition to the empirical information I gathered, I supplemented my findings with a literature review, the reports of governmental institutions and non-governmental organizations, plus the statistics from the Turkish Statistical Institute, the Ministry of Labour and Social Security, and the Social Security Institute.

Overview of the Legal Framework in Turkey

Turkey has the “EU candidate country status” since December 1999, and the accession negotiations had started in October 2005. Additionally, being an important exporter of textile and RMG, as well as various agricultural products,¹³ to the EU countries, Turkey continues to harmonise its laws with the EU *acquis*, particularly concerning environmental protection,¹⁴ consumer and health protection, food safety, and agriculture.¹⁵ Accordingly, Turkish laws and regulations are mostly similar, identical, and/or equivalent¹⁶ in these areas. Although one cannot claim that the EU laws and regulations are *de lege ferenda* norms bringing the highest

¹³ The 1995 Customs Unions Agreement between the EU and Turkey does not include the free movement of agricultural products. However, the European Commission proposed the extension of the Agreement so as to cover, inter alia, agricultural products, which is currently under consideration by the Council of the EU since December 2016.

¹⁴ e.g. Ministry of Environment and Forestry, ‘EU Integrated Environment Harmonisation Strategy: 2007-2023’ (*Ministry of Environment and Forestry*, 2006).

¹⁵ In this context, the negotiations on Chapter 27 (Environment), Chapter 28 (Consumer and Health Protection), and Chapter 12 (Food Safety, Veterinary and Plant Health) have started on 21 December 2009, 19 December 2007, and 30 June 2010, respectively. Chapter 11 on Agriculture and Rural Development is one of the eight chapters, which will not be opened until Turkey agrees to apply the Additional Protocol of the Ankara Association Agreement to Cyprus. Chapter 19 on Social Policy and Employment has not yet been opened. Chapter 23 on Judiciary and Fundamental Rights is one of the six chapters blocked by (Southern) Cyprus. Furthermore, there is still a considerably long way to go in order to satisfy the political aspect of the Copenhagen criteria and, as of February 2018, there are no effective accession talks between Turkey and the EU.

¹⁶ Nazlı Seda Durak Kılıçaslan, ‘Türkiye ve AB’de Organik Tarım Mevzuatı, Uygulamaları ve Değerlendirilmesi’ (The Legislations, Practice and Evaluation of Organic Agriculture in Turkey and EU), (EU Expertise Thesis, Ministry of Food, Agriculture and Livestock, 2015).

standards attainable in terms of protection of the environment and human rights, they are nevertheless in the most advanced form when compared to the standards of the developing countries. Accordingly, the environmental and social adverse impacts of cotton cultivation and the RMG industry in Turkey, seem to stem mainly from the loose enforcement of these laws due to economic, social, and architectural constraints, rather than their content.

For example, it is the constitutional duty of the State and the “citizens” to improve and protect the environment, and to prevent environmental pollution. In other words, the State, corporations, such as the companies engaged in yarn and fabric production, and individuals, such as farmers, are responsible for taking the necessary measures to protect everyone’s right to live in a healthy and balanced environment.¹⁷ Likewise, it is a constitutional duty for the State to protect the efficient land cultivation and to prevent the improper use and destruction of agricultural land.¹⁸ Both the Environment Law and Agriculture Law underline a sustainable environment and sustainable development as a policy priority. Compliance with the international commitments, and particularly with the EU *acquis*, is also expressly mentioned among the environmental and agricultural policy priorities.¹⁹ However, as I will reflect on in the following sections, the scope of application of regulations may be restricted to only the big companies, or there may be barriers to their effective enforcement due to other factors, such as unregistered workplaces.

As a member of the Council of Europe, Turkey’s Constitution is almost word for word in line with the ECHR. However, Turkey ranks as the second country against which the ECtHR found at least one violation of the Convention in the

¹⁷ Turkish Constitution art 56. Furthermore, Environment Law art 3 expressly provides that “everyone” including administration, chambers, unions, and other NGOs have a duty to protect the environment and to prevent pollution.

¹⁸ In doing so, the State should facilitate farmers in acquiring machinery, equipment, and other inputs with the purpose of preventing the improper use and destruction of agricultural land (Turkish Constitution arts 44 and 45).

¹⁹ Environment Law art 1 and Agriculture Law art 5. For example, Agriculture Law art 6(l) envisages the adoption of regulations and legislations, ‘as required by the exigencies of the harmonisation process of national laws with the EU *acquis*’. Art 18(2)(b) underlines that agricultural incentives and support programmes (e.g. for organic production) should be in line with the EU *acquis* and other international commitments.

highest number of cases.²⁰ Moreover, following the coup attempt on 15 July 2016, Turkey declared a state of emergency (SoE) on 21 July 2016, and gave a notice of derogation.²¹ A similar declaration²² was made with regard to some of the rights protected under the International Covenant on Civil and Political Rights (ICCPR), inter alia, the right to assembly, right to association, and the principles of equality and non-discrimination.²³ Then, a series of measures²⁴ concerning fundamental human rights was implemented based on SoE decrees.²⁵ The SoE ended as of 18 July 2018, and the derogations from the ECHR and the ICCPR are withdrawn.

Finally, Turkey is a member of the International Labour Organization (ILO) since 1932, and his party to, inter alia, Right of Association (Agriculture) Convention (No. 11), Minimum Age (Industry) Convention (No. 59), Freedom of Association and Protection of the Right to Organise (No. 87), Right to Organise and Collective Bargaining Agreement (No. 98), Minimum Age Convention (No. 138), Occupational Safety and Health Convention (No. 155), Worst Forms of Child Labour Convention (No. 182), and Promotional Framework for Occupational Safety and Health

²⁰ The ECtHR found 2,988 violations among 3,386 cases filed against Turkey between 1959 and 2017. In 2017, 99 out of 116 cases resulted in findings of a violation of at least one provision of the ECHR.

²¹ Derogation to the Convention on the Protection of Human Rights and Fundamental Freedoms (ETS No. 5), Notification - JJ8187C Tr./005-191, 22 July 2016. The SoE was declared for a duration of three months initially and then extended seven times since.

²² Derogation from the ICCPR, 2016/11235663, New York, 21 July 2016.

²³ It should be noted however, that even if art 26 is not listed among the non-derogable rights under art 4 of the ICCPR, 'there are elements or dimensions of the right to non-discrimination that cannot be derogated from in any circumstances. In particular, this provision of article 4, paragraph 1, must be complied with if any distinctions between persons are made when resorting to measures that derogate from the Covenant.' CCPR, General Comment No. 29: art 4: Derogations during a State of Emergency, CCPR/C/21/Rev.1/Add.11, 31 August 2001,[para 8].

²⁴ For example, the strikes in the glass, metal, banking, and pharmaceutical sectors have been postponed (prohibited) contending that they threaten national security or public health. International Labour Organisation, 'International Labour Conference 15, Provisional Record, Information and reports on the application of Conventions and Recommendations Report of the Committee on the Application of Standards Part II' (106th Session May-June 2017) 124-129.

²⁵ According to the Turkish Constitution, the prohibition on regulating fundamental rights by decrees having the force of law shall not be applied in cases of emergency, and decrees having the force of law issued during a state of emergency, shall not be brought before the Constitutional Court alleging their unconstitutionality as to form or substance (arts 15, 91(1), 148). However, the measures taken by the SoE decrees should be exceptional, temporary in nature, strictly required by the exigencies of the situation, and proportional to the aim pursued (ECHR art 15, ICCPR art 4).

Convention (No. 187). There is no derogation clause under these ILO Conventions, but “necessity” and force majeure are two of the legal grounds for suspending the operation of treaties precluding the wrongfulness of state conduct; provided that the measures taken are in line with the principles of derogation under other human rights treaties.²⁶ Therefore, under the circumstances of extreme gravity, States can take measures “limited in scope and in duration to what is strictly necessary given the exigencies of the situation”, especially with regard to Conventions No. 87 and 98, as envisaged in the reports of the ILO Commissions of Inquiry.²⁷

Table 1. Relevant Laws

Law Name (Translated by the Author)	Law No	Law/By-Law Date	Official Gazette No and Date
Agriculture Law	5488	18.4.2016	18.04.2006, 26148
Environment Law	2872	9.8.1983	11.8.1983, 18132
Labour Law	4857	22.5.2003	10/6/2003, 25134
Law on Cotton Breeding	2903	27.1.1936	1.2.1936, 3221
Law on Organic Farming	5262	01.12.2004	3.12.2004, 25659

²⁶ As the Committee on Economic, Social and Cultural Rights stressed, while some of the rights under the ICESCR, such as right to food and right to health, have a non-derogable minimum core content, labour rights, such as right to work, right to form and join trade unions, and right to strike may be derogable rights in cases of a state of emergency. CESCR, General Comment No. 14: The Right to the Highest Attainable Standard of Health (art 12 of the Covenant), E/C.12/2000/4 (11 August 2000) [paras 43 and 47].

²⁷ International Labour Organisation, *Report of the Commission of Inquiry instituted under Article 26 of the Constitution of the ILO to examine the complaints concerning the observance by Poland of the Freedom of Association and Protection of the Right to Organise Convention, 1948 (no. 87), and of the Right to Organise and Collective Bargaining Convention, 1949 (no. 98)*, GB.227/3/6, 27th session (1984) 119, paras 479-480; International Labour Organisation, *Report of the Commission of Inquiry appointed under Article 26 of the Constitution of the ILO to examine the complaints concerning the observance by Greece of the Freedom of Association and Protection of the Right to Organise Convention, 1948 (no. 87), and of the Right to Organise and Collective Bargaining Convention, 1949 (no. 98)* (1971) LIV OB 2 Special supplement, 24-26, [paras 102-112].

Law on Soil Protection and Land Use	5403	03.07.2005	19.07.2005, 25880
Law on International Labour Force	6735	28.7.2016	13.08.2016, 29800
Law on Trade Unions and Collective Bargaining Agreement	6356	18.10.2012	7.11.2012, 28460
Law on Work Health and Safety	633	20.6.2012	30.6.2012, 28339

Table 2. Relevant By-Laws

By-Law Name (Translated by the Author)	Official Gazette No and Date
By-Law on Environmental Inspection	21.11.2008, 27061
By-Law on State Support for Wastewater Treatment Facilities According to Article 29 of the Environment Law No. 2872	01.10.2010, 27716
By-Law on the Agricultural Foremanship	27.10.2010, 27593
By-Law on the Businesses considered as Industrial, Commercial, Agricultural, and Forest Businesses	3.9.2008, 26986
By-Law on the Chemical Fertilisers Used in Agriculture	18.3.2004, 25406
By-Law on the Fundamentals and Implementation of Organic Agriculture	18.8.2010, 27676
By-law on the Control of Industrial Air Pollution	3.7.2009, 27277
By-Law on the Control of Pollution Caused by Dangerous Substances In and Around Aquatic Environment	26.11.2005, 26005
By-law on the Control of Water Pollution	31.12.2004, 25687
By-Law on the Determination of Power to Conclude Collective Bargaining Agreement and to Vote for Strike	11.10.2013, 28792
By-Law on Environmental Impact Assessment	25.11.2014, 29186
By-Law on Genetically Modified Organisms and Their Products	13.8.2010, 27671
By-law on Good Agricultural Practices	7.12.2010, 27778

By-Law on Production, Import, Export, and Marketing of Organic and Organo-mineral Fertilisers and Soil Regulators, and Organic Natured Other Products Containing Microbials and Enzymes	29.3.2014, 28956
By-Law on the Employment of Persons Obtained or Applied for International Protection Status	26.4.2016, 29695
By-law on the Protection of Drinking Water Basins	28.10.2017, 30224
By-law on the Protection of Underground Waters against Pollution and Deterioration	7.4.2012, 28257
By-Law on the Protection of Waters against Agricultural Nitrate Pollution	18.2.2004, 25637
By-Law on the Terms and Conditions of Working Children and Young Workers	6.4.2004, 25425
By-Law on the Vocational Training of Workers in Works Classified as Dangerous and Very Dangerous	13.07.2013, 28706
By-Law on Waste Management	2.4.2015, 29315
By-Law on the Work Permits of Foreigners under Temporary Protection	15.01.2016, 29594

Table 3. Other Regulations

Other regulations Name and No	Official Gazette No and Date
Circular of the Prime Ministry concerning Seasonal Agricultural Workers (2017/6)	19.4.2017, 30043
Circular on the Supervision of Fertilisers Supplied in the Market (2017/17)	6.4.2017, 30030
Communiqué on the Classification of Dangerousness of Workplaces related to Work Health and Safety	26.12.2012, 28509
Communiqué on the Integrated Pollution Prevention and Control in Textile Industry	14.12.2011, 28142
Communiqué on the Amendment on the Integrated Pollution Prevention and Control in Textiles Industry	10.3.2015, 29291
Decree Having the Force of Law on Certain Regulations concerning the State of Emergency (678)	22.11.2016, 29896
Decree Having the Force of Law on Certain Regulations concerning the State of Emergency (696)	24.12.2017, 30280

Environmental Impacts of Cotton Growing and the RMG Industry

A. Challenges and Constraints in Cotton Growing

All non-organic agricultural production inherently has environmental adverse effects due to the use of chemicals and water. To start with, the cultivation of genetically modified cotton is not allowed in Turkey.²⁸ Thus, all conventional cotton is GMO-free, which has its opportunities and challenges in terms of sustainability.²⁹ Secondly, chemical fertilisers are widely preferred due to the high prices of natural manure resulting from the obstacles before livestock farming and the absence of state incentive. On the other hand, the ban on the most harmful agricultural pesticides, restrictions on the use of chemicals in certain areas,³⁰ and the adoption of an Integrated Production and Pest Management (IPPM) approach³¹ prevent serious soil, water, and air pollution in Turkey. Although the list of banned chemicals, including synthetic fertilisers,³²

²⁸ By-Law on the Genetically Modified Organisms and Their Products.

²⁹ For an analysis of the effects of use of genetically modified cotton see Stephen Morse and AM Mannion, 'Genetically Modified Cotton and Sustainability' (University of Reading 2008) Geographical Paper No.184 [11-13].

³⁰ See the By-Law on the Control of the Pollution Caused by Dangerous Substances in and around Aquatic Environment, which is similar to the EU directive 76/464/EEC. See also the By-law on the Protection of Drinking Water Basins (entry into force: 28.10.2017) which provides that no agricultural activity other than organic farming, and if this is not possible 'good agricultural practices', should be allowed in an area having a radius of one kilometre surrounding drinking water basins (art 9(12), 10(11)). No new industrial facility should be built in an area having a radius of 1,3 kilometres surrounding drinking water basins (art 10(6) and 11(6)), and passing to organic farming and good agricultural practices in such areas should be encouraged (art 11(10)). No wastewater storage, treatment, and disposal shall be allowed in this area (art 11(9)) and in an area having a radius of two kilometres from the rivers used for the purposes of acquiring drinking water. In the remaining part of the drinking water basins, subject to certain limitations, industrial facilities and wastewater treatment plants may be established (art 12). However, full implementation of this By-law and preparation of protection plans for the drinking water basins may take up to five years (Provisional art 1).

³¹ The IPPM approach has reduced the pesticide use by 92 per cent despite the increasing production. Pesticide Action Network, 'A Review of Pesticide Use in Global Cotton Production, Is Cotton Conquering Its Chemical Addiction?' (*pan-uk*, 2017) <<http://www.pan-uk.org/cottons-chemical-addiction/>> accessed 21 March 2018.[18-33]. According to the data of 2006, Turkey also had the lowest rate of use of highly hazardous and extremely hazardous substances. M de Blécourt, [*et. al.*] *Pesticide Use in Cotton in Australia, Brazil, India, Turkey and USA* (Alterra: Wageningen 2010). [35].

³² By-Law on the Chemical Fertilisers Used in Agriculture; By-law on Water Pollution Control (e.g. art 18(h) and 19(f) of the latter by-law prohibits the use of chemical fertilisers and pesticides in certain protected areas.)

is in line with the EU *acquis*,³³ it is observed that the use of a recently banned chemical may continue until it becomes extinct on the market.³⁴ Furthermore, the technological incapacity for measuring the amount of water specifically used in cotton cultivation prevents foreseeing the ecological adverse impacts of cotton growing.³⁵ The modern pressurised irrigation system and water-meters are mostly only used in the western regions. Traditionally, cotton-growers exploit the natural underground and/or surface water resources, nearby. It is only if they use water from the irrigation canals built by the State that the consumption is priced. However, this pricing is based on the area of agricultural land and not on the amount of exploitation.³⁶

Lack of infrastructure also serves as a problem for water treatment. For example, governmental support on building subsoil drainage canals is effectively used in some areas, while in others, no technique is used for preventing wastewater contaminated by pesticides, fertilisers, and crop residues to harm the soil and to mix with fresh underground water resources.³⁷ In some regions, even the surface drainage canals are absent. Finally, treatment of packaging wastes of chemicals should be regulated properly, since they are either left behind in the field³⁸ or burned outdoors causing much more environmental harm.³⁹

³³ This is due to the fact that Turkey being an important exporter of various agricultural products to EU countries, including vegetables and fruits, is obliged to cultivate these products in accordance with the EU *acquis*.

³⁴ For example, chlorpyrifos was banned in 2016, but in the chemical analysis made by the EU on the products imported from Turkey, chlorpyrifos was detected, which resulted in the return of those products, even in 2017. Bülent Şık, “Böcek Öldüren Klorpirifos Stoğunu Çocuklarımıza Yedirecek Miyiz?” (Are We Going to Make Our Children Eat the Stock of Chlorpyrifos?’ (*Bianet*, 2017) <www.bianet.org/bianet/ekoloji/184249-klorpirifos-zehrini-stoklari-bitene-kadar-cocuklar-imiza-yedirecek-miyiz> accessed 9 February 2018.

³⁵ It is not possible to determine the amount of water used particularly for cotton cultivation, because various kinds of crops are cultivated in the same line of irrigation canals.

³⁶ If the farmers use the underground water from a well having an electricity-meter or water-meter, which is quite exceptional, then the amount of water used may be measured. Interview with Mr. Ahmet Şeren, Director of the Operation and Maintenance, General Directorate of State Hydraulic Works (Ankara 12 February 2018).

³⁷ Interview with Ms. Şükran Bayçura, General Director, IPUD, (İstanbul 3 November 2017).

³⁸ *ibid.*

³⁹ Interview with an anonymous farmer from the Aegean Region.

B. Challenges and Constraints in Textile Mills

Treatment of wastewater and waste-chemicals proves to be a problem for the textile mills. Environment Law holds the ones who produce, sell, store, use, transfer, collect, recycle, re-use, and dispose of dangerous chemicals and wastes jointly and severally liable.⁴⁰ An environmental impact assessment (EIA) shall be required for the projects concerning bleacheries, yarn mills, and fabric mills having dyeing departments, if they have a yearly capacity of over 3,000 tons.⁴¹ Concerning the washing plants for denim and other RMGs – except for normal washing with softeners – an EIA may be required by the ministry, depending on an evaluation based on the criteria listed in the same by-law.⁴² However, from 1993 to November 2017, only 32 among 4,835 projects concerning various industries had been rejected due to a negative EIA.

Finally, the scope of application of the Communiqué on the Integrated Pollution Prevention and Control in Textiles Industry is limited to the facilities, where processes such as washing, bleaching, mercerizing, sizing, printing, desizing, and similar pre-treatment, dyeing, and finishing are done with the capacity of more than ten tons per day.⁴³ Even though the textile producers are responsible for controlling all emissions, discharging, and waste, and for implementing the existing best techniques,⁴⁴ they may act reluctantly due to the high costs of advanced technology, which are priced based on foreign currencies.

⁴⁰ Parties polluting the environment or causing environmental destruction will be held responsible regardless of the existence of any misconduct. Environment Law envisages a series of heavy administrative fines and sanctions, including the suspension of activities of the polluter (arts 13, 15, 28).

⁴¹ By-Law on Environmental Impact Assessment Annex-1.

⁴² *ibid* art 15 and Annex-2, 10(c).

⁴³ See also By-law on Water Pollution Control art 31(f) and Table 10.

⁴⁴ Communiqué on the Integrated Pollution Prevention and Control in Textile Industry art7.

Social Impacts of Cotton Growing and the RMG Industry

A. Challenges and Constraints in Agricultural Work

The industrialisation process of the post-WWII era significantly contributed to the mechanisation in agriculture.⁴⁵ Accordingly, and depending on other factors such as rural-urban migration and loss of arable lands, the percentage of agricultural labour in the total employment has considerably declined since the 1950s.⁴⁶ On the other hand, the rate of agricultural mechanisation in some parts of the South-eastern Region remained low until recently.⁴⁷ This structural impediment caused cotton cultivation to be dependent on the manual labour of seasonal agricultural workers, who are mostly employed as unregistered workers.⁴⁸

There are two legal loopholes concerning seasonal agricultural work, which open the way to unregistered employment, leaving the workers without the guarantees of Labour Law: (1) If the duration of the employment relationship is less than 30 days, it will be subject to the Law of Obligations,⁴⁹ (2) Agricultural businesses having 50 or fewer workers are explicitly excluded from the scope

⁴⁵ Agricultural mechanisation in Turkey started following the Turkish War of Independence as a part of the modernisation process and the agricultural reforms in 1920s. Following the introduction of the Marshall Plan as of 1949, the rate of mechanisation significantly increased. For example, in 1954, the first tractor factory was established, and Turkey became an exporter of tractors as of 1979. Mesut Doğan, 'Türkiye Ziraatında Makineleşme: Traktör ve Biçerdöverin Etkileri' (Mechanisation in Turkish Agriculture: Effects of Tractor and Combine Harvester) (2005) 14 *Istanbul University Journal of Geography*. [69].; Nurgün Koç and Bedriye Koç, 'Affects of Marshall Plan on Turkish Economy' (2017) 7 *Sociology Study*. [83]; Tim Jacoby, 'Agriculture, the State and Class Formation in Turkey's First Republic (1923–60)' (2006) 33 *The Journal of Peasant Studies*. [34].

⁴⁶ The agricultural labour constituted 77,4 per cent of total employment in 1955, while this number is around 20 per cent today. However, the unregistered employment rates in the agricultural sector, which is around 80 per cent, should also be taken into account for a more accurate evaluation. Social Security Institute, 'Unregistered Employment Rates' (*sgk.gov.tr*, 2016) <www.sgk.gov.tr/wps/portal/sgk/tr/calisan/kayitdisi_istihdam/kayitdisi_istihdam_oranlari/kayitdisi_istihdam_orani> accessed 8 February 2018.

⁴⁷ For instance, in 2010, only 204 out of 595 cotton harvesting machines were in the South-eastern Region. According to the 2016 data of the Turkish Statistical Institute, 436 of 1155 cotton harvesting machines are in the South-eastern Region.

⁴⁸ Indeed, the use of manual labour reaches 40 per cent in some cities like Şanlıurfa, which causes additional adverse effects due to their geographical proximity to the Syrian border, such as exploitation of refugee labour (and child labour). Fair Labor Association, *Child Labor in Cotton Supply Chains* (2017) 5; Fair Wear Foundation, 'Guidance on Risks Related to Turkish Garment Factories Employing Syrian Refugees' (*fairwear.org*, 2017) <<https://www.fairwear.org/resource/fwf-guidance-risks-turkish-garment-factories-syrian-refugees-2019/>> accessed 8 February 2018.

⁴⁹ Labour Law art 10.

of application of Labour Law.⁵⁰ Another reason for the epidemic problems in the area is the phenomenon of unregistered agricultural foremanship. Legally, there should be written contracts on the one hand between the foreman and the Turkish Employment Agency (İŞKUR),⁵¹ and on the other hand between the foreman, the owner/manager of the field, and the worker.⁵² However, in practice, this legal obligation is rarely fulfilled. High birth rates in rural areas, particularly in the South-eastern region, resulting in an increase in population, unskilled labour-force, and unemployment. Accordingly, a competitive labour market, which makes the agricultural workers vulnerable to a capitalist system of exploitation, occurs. Furthermore, the refugee influx following the Syrian Civil War has boosted this already unbalanced labour market in Turkey, causing other adverse effects such as refugee labour exploitation. Consequently, as of 2016, 82,09 per cent of the agricultural workers are working informally.⁵³

⁵⁰ Unconstitutionality of Labour Law art 4(1)(b) was invoked before the Constitutional Court on the ground that it is against the principle of non-discrimination and equality before the law. According to this contention, the said provision causes an inequality between the agricultural workers working in plants having on the one hand 50 or fewer workers, and on the other hand those having more than 50 workers. The Constitutional Court rejected the argument. The Court interpreted the principle of equality before the law as equality between persons having the same particularities. The Court commented that many of the agricultural businesses in Turkey are family enterprises and they generally work seasonally. Therefore, no complete and correct information could be reached with regard to these families and workers. The enterprises that are continuous and that can be controlled due to their qualifications are only the ones having more than 50 workers. For the enterprises having 50 or fewer workers, working under a service contract will continue to be subject to the provisions of law of obligations. In his dissenting opinion, Osman Paksüt stressed that depending on the type of the crop and the technology used, it would be possible to acquire high turnover rates continuously and with good efficiency. Furthermore, enterprises may divide their businesses into smaller enterprises each having less than 50 workers, leaving them out of the protection of Labour Law. The result would be discrimination between the workers doing the same labour, just because they are working in a smaller or bigger enterprise. Therefore, art 10 of the Turkish Constitution on the prohibition of discrimination would be violated together with art 49 of the Turkish Constitution imposing a positive obligation on the State to protect workers. AYM, Esas s 2013/23, Karar s 2013/123, Karar t 31 October 2013.

⁵¹ See Labour Law art 7(2)(b) on the temporary employment relationship in seasonal agricultural works; By-Law on the Agricultural Foremanship art 5(2) on the requirement to get permission from the Turkish Employment Agency for the temporary transfer of a worker from one employer to another; and Circular of the Prime Ministry concerning Seasonal Agricultural Workers (19 April 2017).

⁵² By-Law on the Agricultural Foremanship art 12.

⁵³ Social Security Institute (n 46).

The problems of seasonal agricultural workers include occupational accidents due to unsafe transportation,⁵⁴ working without health and security insurance, unhealthy living conditions in the field, and low daily wage paid on a lump-sum basis. In fact, recent regulations reflect and answer all the problems faced by the agricultural workers. For example, the foremen, together with the employer, are obliged to ensure a safe transport for the workers,⁵⁵ a daily wage no less than the minimum wage,⁵⁶ a healthy and safe shelter in the field to sleep and eat.⁵⁷

Lastly, unregistered employment may also lead to a risk of child labour both in the field and in the textile mills. Employment of children under the age of 15 is prohibited in Turkey. Children between the ages of 15 and 18 can work under certain conditions⁵⁸ and only in jobs, which do not bar them from attending school.⁵⁹ Children under 16 are not allowed to do dangerous work such as cottonseed and cotton cultivation, hoeing, ginning, confectioning, spinning, weaving, blending,

⁵⁴ In 2017, 385 of 2006 work related deaths were among the agricultural workers, most of them caused by traffic accidents. Health and Safety Labour Watch, Guvenlicalisma.org, 'Report of the Workers Health and Work Safety' (*guvenlicalisma.org*, 2017) <www.guvenlicalisma.org/index.php?option=com_content&view=article&id=19179:ohalkhk-rejimi-is-cinayetleri-demektir-2017-yilinda-en-az-2006-isci-yasamini-yitirdi&catid=149:is-cinayetleri-raporlari&Itemid=236> accessed 9 February 2018.

⁵⁵ To add, traffic controls should be made more frequently and carefully during the travelling times of seasonal workers. Travelling by vehicle for the transportation of workers should be prevented between midnight and six am. By-Law on the Agricultural Foremanship art 11(c), Circular of the Prime Ministry concerning Seasonal Agricultural Workers (19 April 2017).

⁵⁶ By-Law on the Agricultural Foremanship art 11(e).

⁵⁷ A temporary, safe, and functional living space having a sufficient physical area should be built close to the plantation, designed to meet the basic needs, such as water and electricity, and other needs, such as educational, social, and cultural activities, of the workers and their families. By-Law on the Agricultural Foremanship art 11(f), Circular of the Prime Ministry concerning Seasonal Agricultural Workers (19 April 2017).

⁵⁸ Article 71 of the Labour Law provides that:

The working time of children who have completed their basic education and yet who are no longer attending school shall not be more than seven hours daily and more than thirty-five hours weekly... However, this working time may be increased up to forty hours weekly. The working time of school attending children during the education period must fall outside their training hours and shall not be more than two hours daily and ten hours weekly. Their working time during the periods when schools are closed shall not exceed the hours foreseen in the first subsection above.

⁵⁹ *ibid.*

denim fabric production, bleaching, dyeing, and finishing.⁶⁰ However, the harvesting period overlaps with the start of the schools in September and working in the cotton fields also serves as a problem for children over 16. The children in the field⁶¹ cannot attend school for four to seven months, which will further make them unqualified workers in their adulthood and create a vicious cycle of poverty and unemployment. Therefore, seasonal agricultural work for children is considered one of the worst forms of child labour, requiring urgent action to be completely eliminated under the National Employment Strategy.⁶²

B. Challenges and Constraints in Textile Mills

The industrialisation and modernisation processes, which started with the foundation of the Turkish Republic in the 1920s⁶³ and continued with accelerated pace during the 1950s entering a new phase in national development, resulted in, inter alia, the proliferation of textile mills.⁶⁴ However, 98,2 per cent of these textile mills and RMG producers are either micro-enterprises or small and medium sized

⁶⁰ In some exceptional cases, for example, if the dyeing section in a mill is separated from the spinning and weaving section, then the children over 15 may work in the weaving section of that textile mill. Moreover, the production of cotton RMG is categorised as a work with low dangerousness. Dangerousness level of a mill is determined by the Ministry of Labour and Social Security. Agricultural spraying is a very dangerous work, where the worker should be over 18. By-Law on the Terms and Conditions of Working Children and Young Workers arts 2 and 5, Annex 2(22); Communiqué on the Classification of Dangerousness of Workplaces related to Work Health and Safety, Annex I.

⁶¹ In practice, agricultural workers bring their children to the field, regardless of their age and capacity, or they do other works such as looking after the other children, cooking, and cleaning. (n 37).

⁶² On the other hand, it is a social phenomenon that some of the children working in the field are the children of the family enterprises helping their parents in the business. Therefore, these children are excluded from the content of the national strategy for eliminating child labour in the agricultural work. Ministry of Labour and Social Security, 'National Program on the Fight against Child Labour:2017-2023' (2017) 63 Genel yayın.[33-34].

⁶³ Bülent Tanör, *Kurtuluş Kuruluş* (9th edn, Cumhuriyet 2009).[336].

⁶⁴ Türkiye Tekstil Sanayii İşverenleri Sendikası, *Tekstil ve Hazır Giyim Sanayisinin Türk Ekonomisindeki Yeri: Brüt Katma Değer, Dış Ticaret ve Uluslararası Rezerv Birikimi, İstihdam, Yatırım Teşviki Etkileri* (Tekstilveren 2014).[6-7].

enterprises.⁶⁵ In addition, there are a considerable number of unregistered apparel workshops, where occupational health and safety standards guaranteed by laws are generally not met. In these “informal” workshops, the working conditions, such as working hours and wages, may also be lower than what is legally required. This phenomenon proves to become a problem even for the transnational garment corporations adopting the best practices in the sector, since these workshops, as undeclared subcontractors, escape also the scrutiny of certifying agencies and corporate audits.⁶⁶

As a matter of fact, the workers of these ‘sweatshops’ are also unregistered, which creates similar problems to that of the agricultural workers in terms of employment conditions. Economic reasons such as the global and local market rules imposing a competitive environment,⁶⁷ increase in population due to rural-urban migration, high income taxes, and high insurance charges; and social factors such as the unconsciousness of the public concerning the risks of unregistered work, having no power to bargain when starting a job, the desire to retain the unemployment benefits also cause the continuation of the unregistered employment problem.⁶⁸ The legal barriers for foreign workers to obtain a work

⁶⁵ According to the data of 2014, there were 11,849 (67,6 per cent) micro-enterprises, 5,353 (30,6 per cent) small and medium sized enterprises, 320 (1,8 per cent) big enterprises in the textile industry. Numbers and rates for the RMG industry is as follows, respectively: 25,960 (74,8 per cent), 8,514 (24,5 per cent) and 218 (0,6 per cent). Ministry of Science, Industry and Technology, *Report on the Textile, Ready-Made Garment, and Leather Products Sectors*, Series of Sectoral Reports and Analysis (2015/2). The numbers are expected to be much higher than in the ministerial report due to the unregistered workshops. Ertan Erol, [et.,al], *Suriyeli Sığınmacıların Türkiye’de Emek Piyasasına Dahil Olma Süreçleri ve Etkileri: İstanbul Tekstil Sektörü Örneği (The Inclusion Processes of Syrian Asylums in the Labour Market and Its Effects: The Case of Istanbul Textile Sector)*(Birleşik Metal-İş Yayınları 2017).[17].

⁶⁶ Samentha Goethals and Emre Korkmaz, *What’s Changed for Syrian Refugees in Turkish Garment Supply Chains? A Survey and Analysis of Company Action to Address Exploitation and Abuse* (Business and Human Rights Research Center 2017).[7].

⁶⁷ Solmaz Filiz Karabağ [et.,al], ‘Determinants of Firm Competitiveness: Case of the Turkish Textile and Apparel Industry’ (2014) 115 *The Journal of the Textile Institute* .[1-11].

⁶⁸ Adnan Mahiroğulları, ‘Türkiye’de Kayıt Dışı İstihdam ve Önlemeye Yönelik Stratejiler’ (The Informal Employment in Turkey and Strategies to Prevent It) (2017) 22 *Suleyman Demirel University Journal of Faculty of Economics and Administrative Sciences*.[554].

permit further contribute to the problem.⁶⁹

A recent research focused on the informal workshops in Istanbul found out that, on average, female workers and Syrian workers are paid lower wages than their co-workers, in some cases even below the minimum wage.⁷⁰ In the case of Syrian child labour (aged between 11 and 14), the wage becomes as low as 500-600 TL.⁷¹ The same study found out that 97,7 per cent of the workers they interviewed work overtime.⁷² Finally, almost all the Syrians work without insurance, while the rate is 46,6 per cent for Turkish men, and 67,8 per cent for Turkish women.⁷³ However, lack of broad scientific research concerning the garment workshops in other important textile cities, such as İzmir, Adana, and Gaziantep,⁷⁴ prevents us to reach an overall conclusion on the working conditions in the Turkish garment

⁶⁹ Turkey's initial policy has been treating the Syrians as temporary guests, so they had no work permit issued. On January 2016, Turkey passed a regulation allowing any Syrian who has been in the country for six months and obtained temporary protection status to apply for a work permit (Law on the International Labour Force art 17; By-Law on the Work Permits of Foreigners under Temporary Protection art 8). Following this regulation, 15,022 of 2,969,669 Syrians received a work permit (almost 44 per cent being children) under temporary protection as of November 2017. Still, approximately one million Syrians work without a permit in various sectors, mostly in the manufacturing industry. Statement of the Minister of Labour and Social Security at the Commission of Planning and Budget of the Turkish Grand National Assembly (*csgb.gov.tr*, 2017) <www.csgb.gov.tr/uigm/news/bakan-sarieroglu-2018-yili-butcesinin-sunumunu-gerceklestirdi/> accessed 6 February 2018.; Ministry of Labour and Social Security, 'Work Permits of Foreigners' (*Ministry of Labour and Social Security*, 2016) <www.csgb.gov.tr/media/7315/yabancilarin-çalışma-İzlnleri-2016.pdf> accessed 6 February 2018.; Samentha Goethals and Emre Korkmaz (n 66).[6].

⁷⁰ It is also remarkable that all 22 Syrian women, 37 out of 94 Turkish women, 116 out of 278 Syrian men, 26 out of 209 Turkish men are paid below the minimum wage, which was 1,050 TL, when the research was conducted. As of 2018, net pay of the minimum wage is 1,603.12 TL (approximately 433 USD); Ertan Erol, [*et., al*] (n 65).[53-54].

⁷¹ Business and Human Rights Research Center, 'What Changed for Syrian Refugees in the Turkish Garment Industry?' (*Business and Human Rights Research Center*, 2016) <<https://business-humanrights.org/en/syrian-refugees-in-turkish-garment-industry/the-survey>> accessed 12 February 2018.; Samentha Goethals, [*et., al*], 'Business Human Rights Responsibility for Refugees and Migrant Workers: Turning Policies into Practice in the Middle East' (2017) 2 *Business and Human Rights Journal*. [335-342].

⁷² The maximum working time is 45 hours per week (Labour Law art 63); Ertan Erol, [*et., al*] (n 65).[58].

⁷³ *ibid.*[58].

⁷⁴ For the general effect of Syrian migration on the labour markets of five cities (Gaziantep, Hatay, Şanlıurfa, Mardin, Kilis) see Kuvvet Lordoğlu and Mustafa Aslan, 'En Fazla Suriyeli Göçmen Alan Beş Kentin Emek Piyasalarında Değişimi: 2011-2014' (Change of Labour Markets of the Five Cities Which Allow Migrants at Most: 2011- 2014)' (2016) 2 *Çalışma ve Toplum*. [789].

industry.⁷⁵ For instance, it may be expected that the wages are lower than in Istanbul, which has the most expensive cost of living in Turkey.

Table 4. Average Wages of Workers in Istanbul⁷⁶

	Average wage (TL)	Number of Observations
Woman	1106,538	117
Man	1304,048	480
General	1265,34	597
Turkish	1394,811	301
Turkish woman	1183,053	95
Turkish man	1492,466	206
Syrian	1133,632	296
Syrian woman	776,1364	22
Syrian man	1162,361	274

As a matter of fact, unregistered employment is not the only problem in the RMG industry. For instance, the enjoyment of the right to freedom of association proves to be troublesome for the registered workers working in formal workplaces and there is almost no syndical activity despite the existence of 15 different trade unions in the textile and RMG industry.⁷⁷ This is partly due to the fact that the workers

⁷⁵ For example, Yörük claims that there is a semi-formal code of conduct in Istanbul's garment workshops, which brings a standard of working conditions, including the working hours and wages. Erdem Yörük, 'Labor Discipline in the Informal Economy: The Semi-Formal Professional Code of Istanbul's Apparel Urban Factory' (2009) 53 Berkeley Journal of Sociology.[27-61].

⁷⁶ Ertan Erol, [*et., al*] (n 65).[53].

⁷⁷ According to the statistics of the Ministry of Labour and Social Security, dated July 2017, there are 1,005,855 registered workers in the textile industry, 87,997 (8,84 per cent) of which are members of one of the trade unions. More than half of those (48,458, 4,82 per cent) are members of The Turkish Union of Textile, Knitting and Clothing Industry Workers (TEKSİF. It is followed by ÖZ İPLİK-İŞ (Tüm Dokuma, İplik, Trikotaj, Hazır Giyim, Konfeksiyon ve Deri İşçileri Sendikası) having 23,549 (2,35 per cent) members, and TEKSTİL (Tekstil İşçileri Sendikası) having 11,335 (1,13 per cent) members. Furthermore, these three trade unions are the only ones legally authorised to conclude collective bargaining agreements, since they are the only ones having at least one per cent of the total workers in the industry as members. However, in order to have the authorisation to conclude a collective bargaining agreement in a company, a trade union also needs to have at least 40 per cent of the workers in that company as members. (Law on Trade Unions and Collective Bargaining Agreement art 41(1) and By-Law on the Determination of Power to Conclude Collective Bargaining Agreement and to Vote for Strike art 4(1)(a) and (b)).

are reluctant to pay a union membership fee with their already low incomes, and sometimes due to the de facto pressure from the employers to prevent unionisation in the workplace.⁷⁸

Finally, as of 1 January 2018, mediation between the employer and workers became compulsory; this is a prerequisite for taking the case before a court, concerning the disputes arising from all employment relationships.⁷⁹ However, firstly, this is against the fundamental elements of “consent” and “equality” of mediation.⁸⁰ Secondly, it forces the worker to bargain with his/her employer for the rights he/she is already entitled under law, such as wage, compensation, and all other benefits.⁸¹

Conclusion

Consequently, rapid change of fashion trends and consumerism come with its unintended but not unforeseeable consequences. Global outsourcing of cotton growing and RMG manufacturing by transnational fashion brands also outsource environmental pollution and labour exploitation. Even for countries such as Turkey, having relatively high standards guaranteed under the legal regulations, minimising the costs of economic growth and development proves to be problematic as the needs of the society, and the realities of the global and local markets do not overlap with the legal expectations. For example, a worker, whose primary concern is to have a meal for that night, would not have a real choice not to work in an informal workshop where dangerous chemicals are being used without any protection. Or, if a workshop owner decides to employ the workers in conformity with all the requirements of Labour Law, then his/her expenses will increase leading to

⁷⁸ Interview with Ms. Selin Işlakça, Textile Department Client Representative, ControlUnion (Izmir 2 November 2017).

⁷⁹ Nevertheless, if the dispute concerns an occupational accident or disease, then the prerequisite of compulsory mediation does not apply (Labour Law art 20).

⁸⁰ As it is also stressed in an EU Directive, ‘mediation should not apply to rights and obligations on which the parties are not free to decide themselves under the relevant applicable law. Such rights and obligations are particularly frequent in ... employment law’ Council Directive 2008/52/EC of 21 May 2008 on certain aspects of mediation in civil and commercial matters, [2008] OJ L136/3, para 10.

⁸¹ Labour Law art 32.

the employment of one person instead of two, which will, in the end, add to the unemployment problem. Or, the owner will decide to employ both of the workers, but then will not have the power to compete with other workshops in the sector. The same logic applies to develop countries. If they strictly impose the highest standards, they will lose the competitive power in the global market, and accordingly, this will lead to the end of the economic growth and development, which will bring with it more problems. So, the legal, social, economic, and political problems I mentioned in this study are all interrelated, interdependent, indivisible, and in fact, universal.

For environmental and social sustainability in cotton growing and the RMG industry, local and global policies should go hand in hand, starting from the choice of the cottonseed to be used to the recycling of garments. Encouraging formal employment and empowering the workers would facilitate the amelioration of the working and living conditions of the seasonal agricultural workers and other unregistered workers in the industry. Finally, a requirement imposed on all actors in the supply chain to certify all sub-contractors would prevent the informal workshops from escaping the scrutiny of the State, transnational corporations, and the public.

Bibliography

Adnan Mahiroğulları, ‘Türkiye’de Kayıt Dışı İstihdam ve Önlemeye Yönelik Stratejiler’ (The Informal Employment in Turkey and Strategies to Prevent It) (2017) 22 Suleyman Demirel University Journal of Faculty of Economics and Administrative Sciences.

Assembly of Turkish Exporters, ‘Annual Export Report (2017)’ (*tim.org*, 2017) <www.tim.org.tr/tr/ihracat-rakamlari.html> accessed 4 February 2018.

Bülent Şık, “‘Böcek Öldüren Klorpirifos Stoğunu Çocuklarımıza Yedirecek Miyiz?’” (Are We Going to Make Our Children Eat the Stock of Chlorpyrifos?) (*Bianet*, 2017) <www.bianet.org/bianet/ekoloji/184249-klorpirifos-zehrini-stoklari-bitene-kadar-cocuklarimiza-yedirecek-miyiz> accessed 9 February 2018.

Bülent Tanör, *Kurtuluş Kuruluş* (9th edn, Cumhuriyet 2009).

Business and Human Rights Research Center, ‘What Changed for Syrian Refugees in the Turkish Garment Industry?’ (*Business and Human Rights Research Center*, 2016) <<https://business-humanrights.org/en/syrian-refugees-in->

turkish-garment-industry/the-survey> accessed 12 February 2018.

csgb.gov.tr, 'Minister of Labour and Social Security at the Commission of Planning and Budget of the Turkish Grand National Assembly' (*csgb.gov.tr*, 2017) <www.csgb.gov.tr/uigm/news/bakan-sarieroglu-2018-yili-butcesinin-sunumunu-gerceklestirdi/> accessed 6 February 2018.

Ercan Etki, *Tekstil Sektörü Raporu (Report on the Textile Industry)* (TC Doğu Marmara Kalkınma Ajansı Düzce Yatırım Destek 2013).

Erdem Yörük, 'Labor Discipline in the Informal Economy: The Semi-Formal Professional Code of Istanbul's Apparel Urban Factory' (2009) 53 *Berkeley Journal of Sociology*.

Ertan Erol [*et.,al*], *Suriyeli Sığınmacıların Türkiye'de Emek Piyasasına Dahil Olma Süreçleri ve Etkileri: İstanbul Tekstil Sektörü Örneği (The Inclusion Processes of Syrian Asylums in the Labour Market and Its Effects: The Case of Istanbul Textile Sector)* (Birleşik Metal-İş Yayınları 2017).

Fair Wear Foundation, 'Guidance on Risks Related to Turkish Garment Factories Employing Syrian Refugees' (*fairwear.org*, 2017) <<https://www.fairwear.org/resource/fwf-guidance-risks-turkish-garment-factories-syrian-refugees-2019/>> accessed 8 February 2018.

Guvenlcalisma.org, 'Report of the Workers Health and Work Safety' (*guvenlcalisma.org*, 2017) <www.guvenlcalisma.org/index.php?option=com_content&view=article&id=19179:ohalkhk-rejimi-is-cinayetleri-demektir-2017-yilinda-en-az-2006-isci-yasamini-yitirdi&catid=149:is-cinayetleri-raporlari&Itemid=236> accessed 9 February 2018.

Ibrahim Sirtioglu, Turkey Cotton and Products Annual Report, USDA Foreign Agricultural Service, Global Agricultural Information Network (GAIN) Report No TR 7010.

Kuvvet Lordođlu and Mustafa Aslan, 'En Fazla Suriyeli Göçmen Alan Beş Kentin Emek Piyasalarında Deđişimi: 2011-2014' (Change of Labour Markets of the Five Cities Which Allow Migrants at Most: 2011- 2014)' (2016) 2 *Çalışma ve Toplum*.

Lawrence Lessig, 'The New Chicago School' (1998) 27 *The Journal of Legal Studies*.

M de Blécourt, [*et.,al.*], *Pesticide Use in Cotton in Australia, Brazil, India, Turkey and USA* (Alterra: Wageningen 2010).

Mesut Doğan, ‘Türkiye Ziraatında Makineleşme: Traktör ve Biçerdöverin Etkileri’ (Mechanisation in Turkish Agriculture: Effects of Tractor and Combine Harvester)’ (2005) 14 Istanbul University Journal of Geography.

Ministry of Environment and Forestry, ‘EU Integrated Environment Harmonisation Strategy: 2007-2023’ (*Ministry of Environment and Forestry*, 2006).

Ministry of Labour and Social Security, ‘National Employment Strategy First Workshop Report, Textile and Ready-Made Garment Industries’ (*Ministry of Labour and Social Security*, 2016) <www.uis.gov.tr/announcements/19102016/> accessed 6 February 2018.

———, ‘Work Permits of Foreigners’ (*Ministry of Labour and Social Security*, 2016) <www.csqb.gov.tr/media/7315/yabancilarin-çalışma-İzİNleri-2016.pdf> accessed 6 February 2018.

———, ‘National Employment Strategy 2014-2023’ (*Ministry of Labour and Social Security*, 2017) <http://www.uis.gov.tr/media/1479/eylemlanları_en.pdf> accessed 1 July 2017.

———, ‘National Program on the Fight against Child Labour:2017-2023’ (2017) 63 Genel yayın.

Ministry of Science, Industry and Technology, *Report on the Textile, Ready-Made Garment, and Leather Products Sectors, Series of Sectoral Reports and Analysis* (2015/2).

Nazlı Seda Durak Kılıçaslan, ‘Türkiye ve AB’de Organik Tarım Mevzuatı, Uygulamaları ve Değerlendirilmesi’ (The Legislations, Practice and Evaluation of Organic Agriculture in Turkey and EU), (EU Expertise Thesis, Ministry of Food, Agriculture and Livestock, 2015).

Nebahat Tokatli,[*et.,al*] ‘The Clothing Industry in Istanbul in the Era of Globalisation and Fast Fashion’ (2011) 48 Urban Studies.

Nurgün Koç and Bedriye Koç, ‘Affects of Marshall Plan on Turkish Economy’ (2017) 7 Sociology Study.

Pesticide Action Network, ‘A Review of Pesticide Use in Global Cotton Production, Is Cotton Conquering Its Chemical Addiction?’ (*pan-uk*, 2017) <<http://www.pan-uk.org/cottons-chemical-addiction/>> accessed 21 March 2018.

Samentha Goethals and Emre Korkmaz, *What’s Changed for Syrian Refugees in Turkish Garment Supply Chains? A Survey and Analysis of Company Action to Address Exploitation and Abuse* (Business and Human Rights Research Center 2017).

- Samentha Goethals, [et.,al.], ‘Business Human Rights Responsibility for Refugees and Migrant Workers: Turning Policies into Practice in the Middle East’ (2017) 2 Business and Human Rights Journal.
- Social Security Institute, ‘Unregistered Employment Rates’ (*sgk.gov.tr*, 2016) <www.sgk.gov.tr/wps/portal/sgk/tr/calisan/kayitdisi_istihdam/kayitdisi_istihdam_oranlari/kayitdisi_istihdam_orani> accessed 8 February 2018.
- Solmaz Filiz Karabağ, [et.,al.], ‘Determinants of Firm Competitiveness: Case of the Turkish Textile and Apparel Industry’ (2014) 115 The Journal of the Textile Institute.
- Stephen Morse and AM Mannion, ‘Genetically Modified Cotton and Sustainability’ (University of Reading 2008) Geographical Paper No. 184.
- TEKSİF, ‘The Problems of the Sector’ (*TEKSİF*, 2018) <http://www.teksif.org.tr/sektorun-sorunlari_skb_11.html> accessed 15 February 2018.
- Textile Exchange, ‘Organic Cotton Market Report’ (2017)
- , ‘Organic Cotton Market Report (2016)’ (*Textileexchange.org*, 2016).
- Tim Jacoby, ‘Agriculture, the State and Class Formation in Turkey’s First Republic (1923–60)’ (2006) 33 The Journal of Peasant Studies.
- Türkiye Tekstil Sanayii İşverenleri Sendikası, *Tekstil ve Hazır Giyim Sanayiinin Türk Ekonomisindeki Yeri: Brüt Katma Değer, Dış Ticaret ve Uluslararası Rezerv Birikimi, İstihdam, Yatırım Teşviki Etkileri* (Tekstilisveren 2014).