POTASSIUM PERMANGANATE SPRAY REPORT

Temiz Giysi Kampanyası
Clean Clothes Campaign Turkey
This report is the result of a study which researches potassium permanganate’s (PP) harmful effects on denim bleaching workers. Being the first study conducted on the subject, it aims to lay foundation for future legal regulatory implementation.

As part of our field work we interviewed workers who were exposed to PP, in order to obtain firsthand information about their resulting problems in health and life. Ways of exposure are inhalation of the chemical’s airborne particles, and dermal contact with PP, or with sulphite which is used for removing PP from the skin. In addition, we investigated how the garment sector’s widespread system of subcontracting, which extends along Tier 2, 3 and 4 causes occupational diseases and unhealthy, precarious, working conditions. We recorded the working conditions of workers who are manufacturing for the world’s most famous brands.

In order to bleach jeans and give them a worn look, the old method of sandblasting was once employed in Turkey, but has now been replaced by PP, although in many countries sandblasting is still used. The aim of our research was to form an idea about the conditions in which PP is put to use and the effects and potential damages PP has on workers. This research and report should be expanded with further research by medical professionals and with legislation that will regulate the working conditions of denim bleaching workers. In addition, the implementation of legislative arrangements should be monitored more strictly, since monitoring practices in the garment sector are inadequate.

The Clean Clothes Campaign will continue to strive for a future in which the number of occupational diseases have decreased and textile workers have achieved better conditions.
Export Data and the Turkish Market - Country-wide Income

Jeans were manufactured in the late 19th century in America and were considered a western icon, starting in the 1940’s when they entered the Turkish market. Up until the late 1990’s, denim trousers continued to be a luxury textile product.

Turkey’s first encounter with jeans was through the establishment of a denim workshop in the 1940’s by an entrepreneur who arrived from France. This entrepreneur, named Muhteşem Kot, not only introduced a new product to the Turkish market, but also named the jeans after his own surname Kot, thereby adding a new word to the Turkish lexicon.

In the 1980’s and together with the “January 24th Decisions”, neoliberal economic policies gained momentum and consumption of imported goods increased. It was in this period that many foreign brands that were previously not operating in the Turkish market, started to do business in Turkey. Along with the fourth “Five-year Development Plan” import policies were promoted. As a result, local manufacturers who until then had dominance over the jeans market started to lose influence and many small manufacturers were forced to close their workshops. Approaching the late 1980’s, the textile factories established by foreign brands caused the small local manufacturers to lose even more power. One of the actual indicators of this power loss was the fact that in 1992 Turkey’s first local manufacturer and icon Muhteşem Kot, went out of business as well.

The increase of imported goods consumption and low-cost labour in the 1980’s, transformed Turkey into both a cheap production location, and a rising market under the supervision of western apparel brands. The Tekirdağ Çorlu factory which was established by the famous Levi’s brand in 1989 has been a source of employment for local residents for many years and has enabled the region to expand in textile production. Starting from the 1980’s, the textile sector was considered to be one of Turkey’s most important industries. Up until the 2000’s, almost all large clothing brands established production facilities in Turkey, or signed long-term supply contracts with local manufacturers. In Turkey and similar countries, occupational health and safety regulations had not sufficiently taken hold. An important reason why brands headquartered in the US or Europe shifted production to these developing countries and engaged in subcontracting through supply agreements - instead of establishing their own production facilities - was the fact that they found the opportunity to manufacture without being liable for any extra costs brought forth by compliance to occupational health legislation. Not to mention, they took the opportunity to manufacture without providing the working conditions they were liable to provide for their own workers, in other words without taking any legal responsibility for the workers who produced their products. Textile production was shifted to Turkey and other developing countries such as Bangladesh, India, China, Bulgaria, Romania, Mexico, El Salvador and Nicaragua. Consequently, occupational diseases and occupational safety violations increased and in time these violations drew public attention.
The Chronology of Jeans in Turkey

1940’s
Turkey’s first jean workshops were established.

1970’s
Foreign brands penetrated into the Turkish market illegally.

1980’s
Together with policies favouring imported goods, American brands like Levi’s and Lee began operating in Turkey officially.

1987
The first sandblasting sweatshop in Turkey was established.

1989
Levi’s opened its production plant in Çorlu.

1991
Turkish manufacturers established Turkey’s first international brand named Mavi.

1990’s
Increase in illegal contract manufacturing workshops that were outsourced by factories producing for foreign brands.

2003
Chemical bleaching method was introduced as an alternative to sandblasting.

2005
A textile worker was diagnosed with silicosis, a disease contracted in sandblasting factories, for the first time in history.

2008
The “Denim Sandblasting Workers’ Solidarity Committee” was founded with a press release.

2009
Sandblasting was prohibited in Turkey thanks to the efforts of the “Denim Sandblasting Workers’ Solidarity Committee”. As a substitute for sandblasting, the most common method became “potassium permanganate”.

1970’s
Foreign brands penetrated into the Turkish market illegally.

1987
The first sandblasting sweatshop in Turkey was established.

1991
Turkish manufacturers established Turkey’s first international brand named Mavi.

2003
Chemical bleaching method was introduced as an alternative to sandblasting.

2005
A textile worker was diagnosed with silicosis, a disease contracted in sandblasting factories, for the first time in history.

2008
The “Denim Sandblasting Workers’ Solidarity Committee” was founded with a press release.

2009
Sandblasting was prohibited in Turkey thanks to the efforts of the “Denim Sandblasting Workers’ Solidarity Committee”. As a substitute for sandblasting, the most common method became “potassium permanganate”.

The Chronology of Jeans in Turkey
Occupational health and safety issues began to attract attention in Turkey in the 1990s. However, legislation was implemented primarily in the mining industry, heavy manufacturing industry and the construction industry. The textile and leather industry did not receive equal attention, therefore manufacturers did not have to take precautions and workers were exposed to various occupational accidents and occupational diseases. The rise in public awareness concerning occupational accidents and diseases in the textile and leather industries in Turkey started in the year 2005, when sandblasting workers were diagnosed with silicosis.

Despite the abovementioned decline, Turkey is still one of the more important manufacturers in the sector. For example, in 2014 Spain has imported approximately 2 million Euros worth of denim fabric from Turkey. According to the figures, approximately 20% of Spain’s total denim import is from Turkey. According to international data from ITC/Trademap, in 2015 Turkey was the 8th largest garment exporter and the 9th largest textile exporter of the world, thereby possessing a significant denim fabric and clothing production capacity and export potential.

International brands were forced to be more responsive when, in the 2000s, occupational diseases and occupational safety violations became more apparent. However, since the obligation to comply with occupational health and safety legislation meant an increase in production costs, these brands began heading to markets where they didn’t have to comply with such legislation. The chart below shows Turkey’s export data between the years 2000-2015, and the decline in 2008 can be attributed to the rise in public awareness concerning sandblasting. International brands had preferred Turkey due to its ineffective occupational health and safety legislation, but when this began to change and better production conditions were demanded by consumers, export decreased.

In the export of women’s denim trousers, with a total of more than 90 million Euros, Turkey is Spain’s number two partner following Bangladesh. As for men’s denim trousers, Turkey is in third place after Bangladesh and Pakistan, with a total of 59 million Euros of export.
### Garment Export ($)

<table>
<thead>
<tr>
<th>Year</th>
<th>Garment Export ($)</th>
<th>Country-wide ($)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2017</td>
<td>17,045,360</td>
<td>156,782,257</td>
</tr>
<tr>
<td>2016</td>
<td>16,956,074</td>
<td>142,069,560</td>
</tr>
<tr>
<td>2015</td>
<td>16,729,283</td>
<td>143,729,741</td>
</tr>
<tr>
<td>2014</td>
<td>18,729,283</td>
<td>156,452,756</td>
</tr>
<tr>
<td>Total</td>
<td>69,700,256</td>
<td>566,034,314</td>
</tr>
</tbody>
</table>

### Year 2018, total export of non-woven clothing and accessories:

**27,610,795,214 TL**.

* [https://biruni.tuik.gov.tr/](https://biruni.tuik.gov.tr/)

### Turkey's Jean Export (2015) ($) 

<table>
<thead>
<tr>
<th>Country</th>
<th>Export ($)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Germany</td>
<td>271,706,370</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>235,972,543</td>
</tr>
<tr>
<td>Spain</td>
<td>226,672,261</td>
</tr>
<tr>
<td>Netherlands</td>
<td>143,568,551</td>
</tr>
<tr>
<td>Denmark</td>
<td>113,060,236</td>
</tr>
<tr>
<td>Italy</td>
<td>70,719,920</td>
</tr>
<tr>
<td>France</td>
<td>56,240,452</td>
</tr>
<tr>
<td>Belgium</td>
<td>42,712,999</td>
</tr>
<tr>
<td>Czechia</td>
<td>40,591,608</td>
</tr>
<tr>
<td>Romania</td>
<td>34,742,244</td>
</tr>
<tr>
<td>USA</td>
<td>33,933,675</td>
</tr>
<tr>
<td>Poland</td>
<td>30,032,042</td>
</tr>
<tr>
<td>Sweden</td>
<td>27,528,333</td>
</tr>
<tr>
<td>Ukraine</td>
<td>26,022,865</td>
</tr>
<tr>
<td>Algeria</td>
<td>23,480,074</td>
</tr>
<tr>
<td>Russian Fed.</td>
<td>19,746,624</td>
</tr>
<tr>
<td>Israel</td>
<td>12,088,794</td>
</tr>
<tr>
<td>Norway</td>
<td>12,078,291</td>
</tr>
<tr>
<td>Bulgaria</td>
<td>12,070,294</td>
</tr>
<tr>
<td>Canada</td>
<td>11,149,677</td>
</tr>
</tbody>
</table>
Import / Export Data

It is important to look at export figures of denim fabrics before we look at the export figures of denim trousers/jeans. In the last 5 months of 2017, denim fabric export was $154.5 million. This figure rose to $156.1 million in the last 5 months of 2018. As for the export figures of ready-to-wear jeans: in the last 5 months of 2017 it was $654 million, then rose to $724.0 million in 2018, and finally rose to a total of $880 million in the last 5 months of 2018.*

These figures indicate that Turkey’s denim clothing exports are on a continuous rise. As a result of this uptrend, the financial market acquires the need for more workshops and labour force.

One important distinctive feature of Turkey compared to other manufacturing countries such as Pakistan and Bangladesh is the fact that Turkey is a country where the goods manufactured are also consumed. This means that Turkey has an important market potential for international brands. For example, the Inditex Group (Zara, Bershka, Pull&Bear, Massimo Dutti, Stradivarius, Oysho) or the Swedish firm H&M do not only regard Turkey as a low-cost production country, but also as an important foreign market. For this reason, these international brands are forced to take into consideration potential public pressure or consumer campaigns while they regulate the production and working conditions of the contract manufacturing firms which produce for them.

While the amount of these contract manufacturing factories increases, in time they themselves begin to set up brands of their own. By obtaining sectoral know-how from international brands, and observing their design capacity and marketing techniques, these contract manufacturing firms in Turkey established brands such as Mavi, Colins and LittleBig, and succeeded in becoming well-known brands in Turkey in their own right, occasionally rising to known status in other areas of the world.

Market know-how is not the only thing local manufacturers have learned from international brands. Local Turkish brands also learned and, widely applied, the system of outsourcing business to other contract manufacturing firms in order to lower production costs and evade responsibility towards employees. So, this subcontracting procedure is not only implemented by the brands, but also by the firms that are subcontracted by these brands.

The subcontracted firms working directly for the brand are categorized as Tier 1, firms contracted by Tier 1 firms are categorized as Tier 2, and a third subcontracted firm working for Tier 2 is called Tier 3. The prevalence of subcontracting in the industry makes it impossible to follow up on how many subcontracting systems a brand’s product passes through. When compared with Tier 1, small firms that manufacture as the final tier (Tier 3) tend to be illegal workshops where informal employment is high. In this system, Tier 1 distributes the profits to the other subcontractors, but the subcontractor at the final Tier, who does a significant part of the manufacturing, gets the lowest pay for the product produced. For this reason, the final Tier ignores occupational safety rules, ecological hazards, and tends to keep the employment percentage of child workers, informal workers, illegal and migrant workers high. From what has been explained so far, one should not think that the final Tier of subcontractors are responsible for all of these injustices. As a result of other field work we have conducted, it became apparent that the working conditions at Tier 1 subcontractors are not up to standards either. For instance, you can have a look at our September 2018 report in which we studied the working conditions of H&M’s Tier 1 subcontractor Pameks Tekstil from here.

The History and Prohibition of Sandblasting

The sandblasting technique used for bleaching denim was brought to Turkey in 1987 by a Turkish worker who worked previously in Germany. Initially only a few sandblasting workshops were operating under the monopoly of certain brands, however in the late 1990s, when bleached denim became fashionable, the number of workshops rose to around 500. The fact that the cost of setting up a sandblasting workshop was low, and there was nothing else needed but workers, one or two sand storage tanks, and an air compressor, made the increase in workshops rise even faster.

During the sandblasting process, the air produced by a compressor at a pressure of 10 bars, sprays sand from the storage tank onto the denim, thereby enabling the denim to wear out and whiten. The workers who do the spraying have no other choice than to inhale the airborne sand particles, and the silica inside these sand particles causes the terminal illness silicosis. In this regard, silicosis definitely falls under the category of occupational diseases. Consequently it can only be diagnosed by questioning the occupational background of the patient.

According to research done by the Turkish Ministry of Labour, between the years 1987 and 2009, 5,000 to 10,000 workers worked in sandblasting operations. These figures include Romanian, Azerbaijani, Iraqi and Georgian migrant workers. Moreover, almost 98% of sandblasting workers had been working informally. Due to the fact that the miner’s disease silicosis was not expected to occur among textile workers, workers who developed silicosis were initially given treatment against tuberculosis, and many workers lost their lives following long-term tuberculosis treatment.

The reality that textile workers carried the risk of developing silicosis became apparent when, in 2005, Prof. Dr. Metin Akgün who worked at the Erzurum Atatürk University asked a patient to tell him about their daily routine. When he learned that the patient was a sandblasting worker who inhaled silica sand all day long, it was the first time in history that a textile worker was diagnosed with silicosis. This worker who had developed silicosis while working in the textile sector died the same year he was diagnosed, and was referenced in academic journals. In 2007 the popular television program “Arena” recorded the sandblasting process with a hidden camera, and the unhealthy working conditions of sandblasting workers were revealed.

In June 9th 2008, the “Denim Sandblasting Workers’ Solidarity Committee” was founded in order to make the voices of sandblasting workers heard, and to call for a prohibition of sandblasting in Turkey. Following the intensive work of the committee the Ministry of Health prohibited sandblasting in 2009. With a cabinet decree in 2010, silicosis became subject to the public sanitation law, and in 2011 with new legal regulations all silicosis patients who had been working informally were entitled to a pension.
From Sandblasting to Potassium Permanganate

It has been 10 years since sandblasting was prohibited in Turkey thanks to the work of the Sandblasting Workers’ Solidarity Committee and significant public support. Following the prohibition, however, denim bleaching did not come to an end; instead, other methods took over. One of these methods is laser etching. It is the least preferred method of all by the brands and subcontractors, because initial investment cost is high, production is slow, and the outcome is too uniform. The method most preferred was bleaching with the chemical potassium permanganate, due to its high production speed and low initial investment cost.

Even though the European Chemical Agency (ECHA) strives to reclassify potassium permanganate in the category of “hazardous chemicals”, the dangerous effects of potassium permanganate on denim bleaching workers has not yet been investigated. This report is an outline of the first research carried out on the subject of potential harm caused by working with potassium permanganate.

In order for the chemical to be more effective, it is common to sand the denim prior to applying the chemical. After sanding, the potassium permanganate is applied to the denim with a brush or with a spray gun. In addition, we observed that in order to decrease the amount of chemical particles that workers inhale, some firms use the “waterfall method”. The waterfall method neutralizes the chemical and decreases the amount of airborne particles with the help of continuous recirculation of sulphite containing water located behind the area where the chemical is sprayed onto the jeans. How frequently these mitigation methods such as the waterfall system are applied, and other mitigation methods like masks and regular health check-ups were important issues in our fieldwork.

To conclude, a small number of businesses in Turkey also use potassium permanganate applicator automation machines. The workers who stand beside the machines slip the denim trousers onto the machine’s handles, and the machine applies the potassium permanganate automatically. These machines are capable of bleaching 3000 to 3500 trousers a day.
How is Potassium Permanganate Applied?

First, the amount and density of the chemical potassium permanganate is determined and a mixture is prepared. The potassium permanganate is then diluted by adding water, and it becomes a red-coloured dense substance. Then, two different methods can be applied in order to obtain a localized whitened effect in line with what a brand would order.

Application With a Spray Gun:
A spray gun is filled with the prepared potassium permanganate mixture and is sprayed onto the previously washed and dried jeans. The area onto which PP is sprayed, obtains a red coloured look. After this procedure, the jeans are washed again, this time with sulphite. Sulphite is a chemical that neutralizes the potassium permanganate. After washing, the PP-applied area turns white in colour. Using this method, an average worker can bleach approximately 800 trousers a day, though this figure varies according to the level of whiteness the employer wants on the jeans.

Application With a Brush:
Again, the appropriate amount of potassium permanganate is dissolved into a solution, and a worker applies it onto the jeans with a brush. The jeans turn red in colour, and just like the other method they are washed with sulphite. Using this method, an average worker can bleach approximately 600 trousers a day.
Health Conditions

Before we discuss the health conditions of denim bleaching workers, it would be beneficial to look at what degree occupational disease and safety laws are being implemented in Turkey. Occupational disease is defined as follows: “The temporary or permanent state of disease; or physical or mental state of discomfort caused by the working conditions the worker is exposed to.” However, the concept of occupational disease is not well-known in Turkey; therefore workers do not visit occupational disease hospitals to get an “occupational disease” diagnosis. According to a 2012 presentation by the former Occupational Health and Safety Vice President Dr. Rana Güven, the prediction of occupational diseases in Turkey is 40,000 to 120,000 cases a year. However, only 433 cases had been recorded in the year 2011. Another impediment against workers getting an occupational disease diagnosis is the prevalence of informal labour. All of the 122 sandblasting workers who have lost their lives because of silicosis to date were working informally. Lastly, workers are afraid of not being able to find a new job after receiving an occupational disease diagnosis; so they refrain from getting one. These are all reasons why occupational diseases are not being sufficiently discussed.

To return to the issue of denim bleaching and potassium permanganate, we found in our research that what workers complain about most are skin problems. Almost all of the workers we interviewed said that applying the chemicals PP and sulphite without wearing masks, safety goggles and gloves, causes skin irritation. The fact that employers do not provide the workers any other option besides sulphite to remove the potassium permanganate is another issue in itself.

Our initial hypothesis prior to this study was that workers would report having experienced mainly respiratory problems, but in fact we witnessed that skin irritation problems are more prevalent. Workers also declared that they did not receive regular health examinations at their work places, and that it was difficult for them to go to the hospital when they were ill. Workers who had a physician at their workplace said that the occupational physicians only intervened to a certain degree, and when those physicians told them to go to the hospital, it was a difficult feat because workers didn’t have a referral or appointment.
“I was ill 20 days ago. What is there to say? I was too weak to stand upright. Our workplace physician came. I went to see him, he gave me medication. He examined my lungs, and said, “Go and see a doctor in a hospital”. No hospital accepts patients here without an appointment. And private hospitals are very expensive. I can’t afford to go to a private hospital. Anyway, I couldn’t get permission from work. I thought maybe I can get in without appointment. You know, because it’s an emergency, they can make an exception. They didn’t, they sent me back.” M, 32

For the potassium permanganate to be effective, the jeans must first be abraded so that the chemical applied can easily be absorbed by the denim fabric. The workers who sand jeans in confined spaces all day long inhale the airborne thread particles, and risk developing the disease “byssinosis”. Byssinosis is an occupational lung disease caused by inhaling vegetative dust from plants such as cotton, flax (linen), and hemp (cannabis). The disease’s popular name in Turkish is “pamukçuk”, and it is common among ginnery workers. The first prospective study on this disease in Turkey was done in the 1960s with cotton weavers in the Kayseri region. The researcher Dr. İsmail Topuzoğlu had observed that byssinosis cases varied between 12% to 15% of workers observed. Today, these figures amount to 35%*. Silicosis was known to be a miner’s disease, and its first occurrence in the textile industry was among sandblasting workers. In the same way, besides ginnery workers, byssinosis may also develop among denim sanding workers who prepare jeans for the application of PP.

“Our friend... He slowly began to lose weight and fell ill. He was rushed to hospital, and they asked him, “Where does it hurt?” When he finally said, “My kidneys,” they took an x-ray. The doctor said, “Both your kidneys have decayed.” They want to operate on him in order to remove one of his kidneys. The other one is in slightly better shape. And from the kidney they remove a bright green something as big as an egg and made up of threads you know, coming from the sanding dust. Now his kidneys are healthy again, just think of it.” A, 33

We observed that denim bleaching workers are aware of the negative conditions brought forth by the methods used in the past. Even though the workers are not informed about the danger of the methods they themselves are using, all the workers whom we asked about sandblasting said they were aware that sandblasting was fatal and that it wasn’t carried out anywhere they knew of.

“If I had been doing sandblasting work, I wouldn’t be alive today.” A, 31
Legislating the Use of Potassium Permanganate in the Textile Sector

It is a fact that denim products bleached with potassium permanganate are not as harmless for the consumer as products bleached by way of sandblasting. Chemical residues on the surface of the denim, even after the denim has been washed, can cause skin irritation and allergic reactions. With a report published in 2016, the European Chemical Agency aimed to reclassify potassium permanganate in the category of “hazardous chemicals”; indicating in the report that in case of continuous contact with potassium permanganate lack of sexual drive, impotency, and impaired fertility was observed. Moreover, according to the same study, workers who were exposed to potassium permanganate for a period of 28 days experienced a loss of appetite. When we consider the data provided by the European Chemical Agency and the statements of workers whom we interviewed, it becomes clear that there is a need to conduct medical research concerning the health conditions of workers who are in continuous contact with PP, by way of dermal contact and/or inhalation. Based on the outcomes of medical research, legislation that will determine PP’s terms of use, protective equipment to be utilized, ratios of the mixture to be used, and maximum duration of exposure to potassium permanganate should be established. In work spaces where there is no legislation concerning potassium permanganate, the provision of masks and gloves is entirely arbitrary and conditioned by the rules the foremen have laid down. Moreover, in cases where the firm does provide masks and gloves, whether or not to use them is up to the worker.

Clean Clothes: “Do you wear a mask?”
“If you want to wear one, they give you one.”
A, 34

“Believe me, after a certain point it begins to bother...
Most people don’t wear one, me neither, I won’t lie.”
M, 32

Masks that are handed out in the textile sector are dust masks which do not protect against gaseous chemicals circulating in the air. One of the reasons why dust masks instead of gas masks are used may be old habits dating from the sandblasting period. Another reason is the fact that dust masks are much cheaper compared to gas masks. For example, the price of one dust mask varies between 1 to 10 TL, whereas gas masks are priced between 150 to 500 TL.
Potassium Permanganate and Field Work Data

Worker Profile
All of the workers we interviewed had migrated to Istanbul from East Anatolia and the Black Sea Region in order to find work. Before coming to Istanbul, most of these workers secure their job with the help of a relative who is already working in the textile sector. Since many of the workers in this sector have been doing this work for many years while also carrying social disadvantages like being a migrant or a former inmate, they stated that they had no other choice than to keep working, even though they knew the work leads to occupational diseases.

Migrant Workers
There are many migrant workers in the textile sector, and they usually work in Tier 2 and Tier 3 subcontractor firms which engage in informal and illegal production. The parent company tends to outsource work to complementary sectors (sewing, bleaching, washing, decorating with stones, fixing accessories, embroidering). Since the ratio of informality is higher in these sectors, the ratio of hiring informal migrant workers is also high. Some workshops provide the migrant workers food and a sleeping place in the same building as the workshop, or somewhere close to the workshop. There are also workshops which employ workers who have already settled in Turkey and who have a living space of their own.

During our research we had the chance to speak to only one migrant worker. We observed that migrant workers avoid spending time in public spaces, because they are usually undocumented in the country. According to the information we received from Turkish workers, the majority of migrant workers are Afghans, Bangladeshis, Syrians, Georgians, Iraqis, Turkmenistanis, Uzbekistanis, and Pakistanis. We also learned that they usually receive 50% less pay compared to Turkish workers. On the other hand, workers who do work considered “dirty”, i.e. sanding or applying potassium permanganate, receive 50% more payment compared to an average worker.

According to research carried out by TÜİK (Turkish Statistical Institute) in 2018, among foreign nationals who came to Turkey in 2017, Iraqi citizens took the first place with 26.6%, followed respectively by Afghans (10.4%), Syrians (7.7%), Azerbaijanis (5.7%) and Turkmenistanis (5.6%).

* http://www.tuik.gov.tr/PreHaberBultenleri.do?id=30607
Our question about which migrant community is the largest was answered by one worker as follows:

“Pakistani people are the largest group. They come and go slowly and gradually. I have been working here for three years, when I started there were Bangladeshi. Nobody works with Afghans. Afghans are united; they are not as dispersed as the others. When something goes wrong the Afghans gang up, they quit the factory all together. Therefore they are not so popular.” M, 32
A Workshop of One’s Own

In Esenyurt, we interviewed A. who had worked for various textile companies for many years and then established his own workshop.

Nowadays the textile sector is a sector in which one can find work easily and, along with the construction sector, it is a sector where a migrant worker who comes to Turkey can find work quickly.

In the past, business traffic was not as intense, finding work in the sector was more difficult, and quitting work after a short period was not common. Today, the profession does not require much skill, and is easy to learn, but physically it is demanding and business traffic is intense. Therefore company owners try to decrease traffic by laying down criteria such as being acquainted or being fellow townspeople in order to get hired.

“"In 2001 there was GAP textile in Malatya. Maybe you've heard of them. It's a very big company. The owner is Çalık from parliament, his company. Approximately 3000 people, 3000-3500 people work there. In those times you had to have a relative or an acquaintance who knew a member of parliament or the mayor, if you wanted to work there. Nobody could get work there. I was working as a sander there." A, 38

From Being a Worker to Owning a Sweatshop

The prevalence of Tier 2, 3, 4 subcontracting and the reasons behind it were discussed in the previous sections. Denim washing plants, which constitute one section of subcontracted companies in the industry, were places where the procedure of potassium permanganate bleaching was also carried out. In time, this bleaching procedure became a separate subcontracting business in itself.

We observed during field work that this became general practice when the craftsmen working in the washing plants realized that a potassium permanganate workshop did not have high initial investment costs and opened their own workshops. Sometimes the washing plant owners encourage their craftsmen to open up a workshop and make sure the workshop works as a subcontractor on piece-rate pay. This method is widely used in denim bleaching workshops. Through subcontracting on piece-rate pay, the washing plant employing contract manufacturers minimizes risks and switches to a less costly practice. The employer pays his/her craftsman on a piece-rate basis, covers the craftsman’s side expenses, and when the products to be bleached are damaged, the craftsman is the only one to carry the burden of the risks that occur. All the while, the employer continues to make easy money from selling the piecework that he/she subcontracted.
The Cost of a Denim Bleaching Workshop

The fact that the initial investment cost of a small chemical denim bleaching workshop is low, is one of the factors that makes the abovementioned contract manufacturing method so attractive and prevalent. These contract manufacturing workshops, that are mostly informal and illegal working spaces, are able to reach the target price by paying wages below the minimum wage, as well as by cutting back on taxes, equipment and protections for workers’ health and safety. Since these businesses manufacture informally, they operate outside the control mechanisms of the state.

In order to establish an ordinary denim bleaching workshop, iron legs called “robots” are bought for 500 TL a piece. An old truck’s inner tube, which one can get free of charge from a tire dealer, is fixed on these iron legs. The only thing left to buy is a compressor that will inflate the inner tube and transmit compressed air to the spray gun. As mentioned above, employers support their craftsmen financially to set up a workshop, in order to lay the burden of legal and economic risks on their workers-turned-workshop-owners. The initial investment cost of establishing a workshop composed of 4 robots which are capable of bleaching about 2000 jeans per day, is approximately 7000 TL.
Generations of Denim Workers

Workers who work in bad conditions, who have developed silicosis or whose social rights are being violated, are defined by the workers we interviewed as “the previous generation”. As such, during the interviews they describe a general state of healthier working conditions when compared to the conditions of the previous generation.

Moreover, the use of the word “generation” makes us assume that the interviewed workers have family members who were also denim workers in the past. In practice, there are many workers who work together as father-son or uncle-cousin, thus this profession becomes a family tradition.

“He wouldn’t employ a stranger, not in a million years! Only people from the Black Sea region... He only works with men he knows and who he can trust.”

İ, 30

The factory İ. works in is a factory that used to do sandblasting and 5 of its employees have lost their lives to silicosis. Following a court decision, the firm had to pay a substantial amount of compensation to the workers who developed silicosis. The firm’s attitude described by İ. leads us to believe that it prefers to employ workers it can keep in check, in case a similar situation arises.

Besides this, there has occurred a new work method non-existent for the old generation, but common in new generation denim bleaching. Workers are called to work at workshops or factories as support staff when orders intensify, and they are employed as additional staff on a daily or periodical basis in exchange for day wages. They work uninsured and informally and wait for the next period to be called to work again.

These groups of workers, who are known as “standby workers”, are common in the construction sector, but didn’t exist in the textile sector until recently. These standby workers do not just stand and wait for work early in the morning at the town square, as they did in the past. They also find daily work via related Facebook groups. In these groups, periodical work such as child care, cooking, and watchman services are more sought-after, but we observed that the textile sector is also actively involved. Such that, middlemen who earn money by linking day-to-day jobseekers with employers, have even emerged. Alongside other middlemen who obtain residence permits for migrants, these business agents are the ones to make use of these Facebook groups the most.
Housing and Living Conditions of Workers

As mentioned earlier, it is a common practice for textile workshops, especially workshops which employ informal migrant workers, to provide for an apartment where bachelor workers can stay together, or a space on the upper floor of the workshop where the workers can sleep. This practice enables the workshop owner to pay his employees less, and provides the opportunity to control the informal workers by keeping them out of sight while they commute to work. Workers, who are not provided any housing by the workshop owner, usually live together in apartments close to the workshop, or in their own apartment together with their families.

The fact that almost all workers live in surrounding neighbourhoods of the workshops suggests that the air they inhale is not only limited to working hours, but that it is a problem that affects their social lives as well. All living creatures are negatively affected by the uncontrolled gas emission which reduces the air quality in the area. These conditions, which also affect the periphery of the surrounding neighbourhoods, force us to discuss the harmful effect on not only the workers, but also the inhabitants of surrounding communities. Especially in Küçükköy and surrounding areas the many children who play in the street in unhealthy environmental conditions are exposed to gas, dust and smoke all day long.

To Become a Denim Worker

Workers perceive bad working conditions to be fate, a situation they are obliged to deal with and can’t evade.

“We breathe in the air; but we don’t have a choice, we don’t have another profession. If I quit my job to enter another profession... I have been in Istanbul for 15 years; I have been doing this work for 15 years. I have never done anything else.” İ, 28

Another worker we interviewed stated that it was difficult for him to find work because he is a former prisoner; therefore he considered his job to be a blessing. Prejudices prevent ex-inmates to participate in social and economic activities, and for this reason they prefer to take whatever job they can find, even if it is precarious and informal.

“We’ve said I spent time in prison, and people who have been in prison can’t work anywhere they want. My boss, god bless him, is an acquaintance of mine, he gave me a chance to work, so I’m doing my job. Of course I would like to have a better job, with better working conditions, but for now I am obliged to do this work. Maybe you will say, “But this work is deadly”; but believe me if I didn’t work I would maybe die in even worse conditions. I am okay for now.” H, 34
Inspection

How frequently the workshops are inspected by inspectors of the Ministry of Labour or by the employer brand varies according to which tier the workshop is a part of. While a workshop that operates informally and secretly is not subjected to any of the two aforementioned types of inspections; based on the interviews we did with workers, we tried to compile our findings about the degree to which formal workshops are being inspected.

As far as we can see, brands do inspect whether production is in line with stipulated standards and from time to time the working conditions of workers are also inspected. We could not obtain any information about the frequency of inspection and the criteria inspected.

The information we obtained from the interviewed workers about the companies they were working for, indicated that different terms of inspection coexist. In addition, it was stated as common knowledge that foreign brands carried out inspections in a stricter and more frequent manner, when compared to local brands.

Working Conditions

Most of the workers we interviewed stated that, as a standard, they worked 12 hours a day, 6 days a week. However, according to labour laws, the legal working hours maximum is 45 hours per week. In case this limit is exceeded, overtime wages must be paid. We observed that most of the workshops pay overtime after 72 hours of work. In other words, they don’t pay extra for the first 27 hours of overtime; they only pay overtime after 27 hours are exceeded.

In addition, the law prohibits working more than 11 hours a day, even if the worker has consented. However, the interviewed workers stated that, as a standard, they worked 12 hours a day. One exception is the worker M, who stated that when working 12 hours a day for Firm 1, the brand they were producing for demanded the working hours to be decreased to 10 hours a day.

In businesses that are inspected as such, double registers are kept in order to evade legal inspections. While one register shows that the shift work system is implemented according to the rules, in reality workers are being put to work in illegal intervals. Yet another problem is the fact that none of the interviewed workers mentioned overtime pay as part of their understood rights.

Only corporate factories provide for transportation payment. As for food, the distinction between corporate factories and workshops stands out once again. While all of the corporate and big factories provide dining halls for the workers, in workshops that do business on a piece-rate basis, the right to transport and food provision has been taken from the workers. In addition, some corporate firms simply give workers buttermilk and yoghurt as refreshment. This can be considered a right, but at the same time it can also be considered an initiative which indirectly acknowledges the damage potassium permanganate does to the lungs.

The salaries of the workers interviewed ranges from 2,000 to 3,000 TL. The insurance premiums of all the legal workers we interviewed are payed according to the minimum wage. All the workers are aware that this implementation steals their future away, but they state that it is the accepted general practice in the sector.
“We don’t have much inspection here. Because there is no corporate identity, we don’t have much of it here, but in other places I went to, there was inspection every two days, every three days, once a week.” İ, 28

“The inspector comes, the accountant slips him money, and he leaves. That’s the truth. I have never seen any inspector.” F, 40

“They pull over an ambulance outside. Once in 1.5 years. I went inside three times. The brand does this, pulls it over in front of the workplace.” İ, 30

Methodology

Our field work focused on workshops and their surroundings in Istanbul. We conducted our study in Istanbul’s most cosmopolitan places such as Güngören, Gaziosmanpaşa and Esenyurt where the industrial neighbourhoods are largely located. The interviewees were selected using snowball sampling. In-depth interviews were conducted, and the interviewees were informed about the aim of the study in general terms. In order to protect individual rights, the names of the interviewees are kept secret, only their initials were used. In addition, the factories and workshops in which working conditions were investigated have not been named, but numbered, e.g. Firm 1, 2, etc.

It is important to define the problems we encountered while interviewing denim workers, so that the project can be better understood. The most important factors that played a role in the difficulties encountered during field work, was the prevalence of illegal workshops and informal labour and the underpaid worker’s fear of employment loss. As part of the textile sector, the denim bleaching workers are active in limited areas of Istanbul, and these areas are in the periphery of the city, isolated from living quarters. This made it difficult for us to access these areas, however we succeeded in contacting workers in canteens and coffeehouses at restricted times such as lunch breaks. When convenient, we maintained contact on weekends.

We encountered many Turkmen, Syrian, Afghan and Bangladeshi workers in these areas, but due to the fact that the scope of the project was limited and we didn’t have interpretation support, we haven’t been able to sufficiently communicate with these workers. We were only able to interview one Afghan worker who knew a little Turkish.

The duration of the project was three months, of which two months and 15 days was reserved for field work, and about 25 days for transcription and reporting. The project coordinators are Abdulhalim Demir and Fevzican Abacıoğlu from Clean Clothes Campaign Turkey. The researchers are Damla Uçak, Volkan Işıl and Tayfur Onat. The report is written by Çiğdem Dilara Sönmez, designed by Fırat Seymen and translated by Ufuk Güngör.
This report was produced with the financial support of the European Union. Its contents are the sole responsibility of Clean Clothes Campaign Turkey and do not necessarily reflect the views of the European Union.