

TOXIC TRADE OF PESTICIDES IN IRAQ

A GROWING MARKET AND A SHRINKING STATE

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1

KEY FINDINGS

Different wars have long subjected Iraq to toxins.¹ Today the international trade of highly hazardous pesticides, in the name of increasing agricultural profitability, continues this violent legacy. Many studies have pointed out the global toxic effects of pesticides on humans, agriculture, food, and the environment.² This study aims to understand the pesticide trade in Iraq, specifically. It gives an overview of the trade and the pesticide market in Iraq. It names the companies and the way they work in the Iraqi market. It looks at the specific kinds of pesticides that are introduced into the Iraqi market. The study also provides an insight into the role of the state within this trade, the outcomes of this illegal trade, and its toxic effects on farmers and peasants.

SUMMARY OF FINDINGS



Iraq's pesticide imports have more than tripled in the last 10 years. In 2021, Iraq imported USD 63.9 million's worth of pesticides from China (28.54% for USD 18.2 million), Germany (12.07 %), then Turkey, India, Hungary, UAE, and Jordan.



Key Companies: Major global companies, like Bayer and Syngenta, operate in Iraq through Jordanian, Lebanese and, to a lesser extent, Iraqi subsidiaries. Chinese companies carry out their trade through Iraqi subsidiaries exclusively. Glyphosate, a highly controversial active ingredient that Bayer had developed, is marketed and sold in Iraq today by Chinese and Indian companies.



Bayer and Syngenta, whether directly or through subsidiaries, sell the following active ingredients in Iraq that are banned in the EU and considered **Highly Hazardous Pesticides**: Difethialone, Coumatetralyl, Imidacloprid, Thiamethoxam, Lufenuron, Tefluthrin, Triasulfuron, Chlorothalonil.



Global agro-chemical corporations' profit from the existing Iraqi government subsidies and plant protection programs intended for farmers in Iraq: The active ingredient Tebuconazole, which Bayer sells to Iraq, is given out for free to farmers by the Iraqi government. Tebuconazole is considered a Highly Hazardous Pesticide. Syngenta also profits from the Iraqi government's plant protection program which includes the aerial spraying of date palms. The active ingredient used in spraying is the Syngenta-produced Thiamethoxam, which is banned in the EU for its toxicity.



The Iraqi state's inability to control and regulate the market in tandem with corruption and a large informal economy facilitate the **illegal trade of highly toxic active ingredients** that are not registered in Iraq. Paraquat, a highly toxic ingredient banned in the EU, appears and is used in the market.



Global agro-chemical corporations do not exercise human rights due diligence when it comes to the safe use of pesticides in Iraq, thereby putting **farmers at great risk**.



Rural Countryside, Yousefia, Surroundings of Baghdad

2

METHODOLOGY

Accessing reliable data on trade in Iraq, a large informal economy, is challenging, partly due to the general political situation of insecurity and because the two statistical offices in Baghdad and Erbil are yet to build their full working capacity. Data in this study is mainly based on Harvard's The Atlas of Economic Complexity (The Atlas) and, to a lesser degree, on statistics provided by the Food and Agriculture Organization (FAO). Both sources draw their information from the United Nations Commodity Trade Statistics Database (UN COMTRADE).

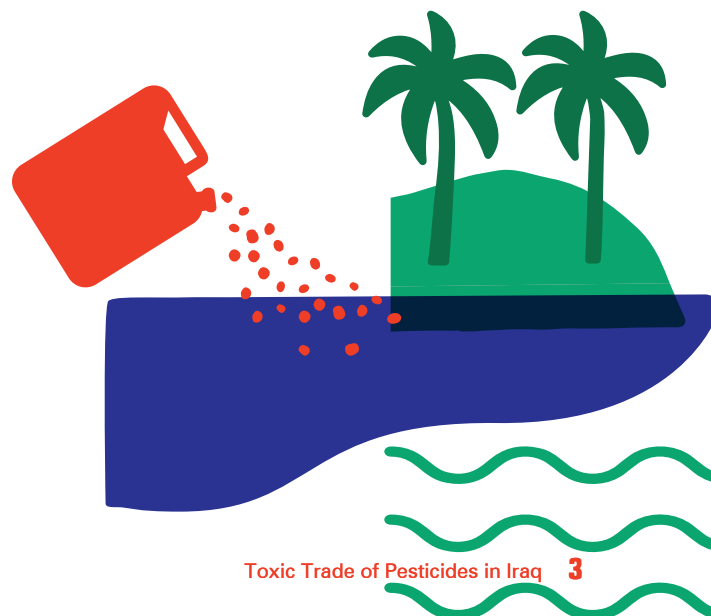
FAO mainly bases its information on the data provided by member states.³ Since Iraq is one of the countries that does not report this data regularly, or at all, FAO also uses mirror trade statistics based on the data provided by Iraq's trading partners.⁴ To overcome the challenge of missing or unreported data on Iraq, The Atlas works with estimations (unlike FAO). Therefore, The Atlas is able to provide more detailed data, including on Iraq's trading partner countries, based on the UN COMTRADE and the International Monetary Fund (IMF).⁵ This explains why Iraq's import values on pesticides differ widely between the FAO and the The Atlas, although they are both based on the UN COMTRADE.

The Ministry of Agriculture and the Ministry of Planning in Iraq provide important sources for this study.⁶ The author obtained from these Iraqi ministries various documents on registered pesticides, active ingredients, and the companies operating in Iraq. The author then cross-checked this data with analogs from the European Union Pesticides Database,⁷ the World Health Organization (WHO)'s Classification of Pesticides by Hazard,⁸ and Pesticide Action Network (PAN)'s database on Highly Hazardous Pesticides.⁹ This study analyzes this information to identify registered pesticides in Iraq, their levels of toxicity, and the companies and subsidiaries operating in the country.

To assess and understand the market from the perspective of farmers, traders, and the Ministry of Agriculture, semi-structured interviews, with multiple stakeholders, were conducted for this study. These interviews took place between March 7, 2023 and March 25, 2023 in Baghdad, its outskirts, and Abu Ghreib. The breakdown of these interviews by stakeholders is as follows:

- Two interviews with employees of the Ministry of Agriculture in Baghdad
- Two interviews at the Ministry of Agriculture, Department of Plant Protection in Abu Ghreib
- One interview with a former employee (before 2003) of the Ministry of Agriculture in Baghdad
- One Interview at the Mustansariya University of Baghdad, Department of Agriculture, in Baghdad
- Five interviews with farmers in Yousefia, Baghdad
- Five interviews with salespeople at five different agro-chemical retailers in Baghdad City and Yousefia, Baghdad

Since many interviews revolved around sensitive topics concerning the volatile security situation in Iraq, the limitations of state control over markets, illegal trade, and different levels of corruptions, the author of the study decided to anonymize the specific positions and names of the interview partners. Provided that sources will be used ethically, names and contacts can be shared upon request.



3

TRADE IN PESTICIDES

In 2011, Iraq imported pesticides valued at USD 17.5 million. Ten years later, in 2021, that number spiked to USD 63.9 million, according to the Atlas. Thus, the import value more than tripled within a decade, and is likely to increase in the future. Regionally, Iraq’s pesticide imports are higher than those of Jordan (USD 25.1 million) and Lebanon (USD 38.5 million), but incomparable to Turkey’s extremely high pesticide import value (USD 453 million). At the same time, Iraq is an emergent market for many agro-chemical corporations and businesses. In 2021, the largest share of pesticide imports came from China (28.54 %) for USD 18.2 million, followed by Germany (12.07 %) for USD 7.71 million.¹⁰ The rest came from Turkey (11.8 %), India (9.8%), Hungary (7.3%), United Arab Emirates (6.3%), Jordan (4.3%), and other countries with smaller percentages.

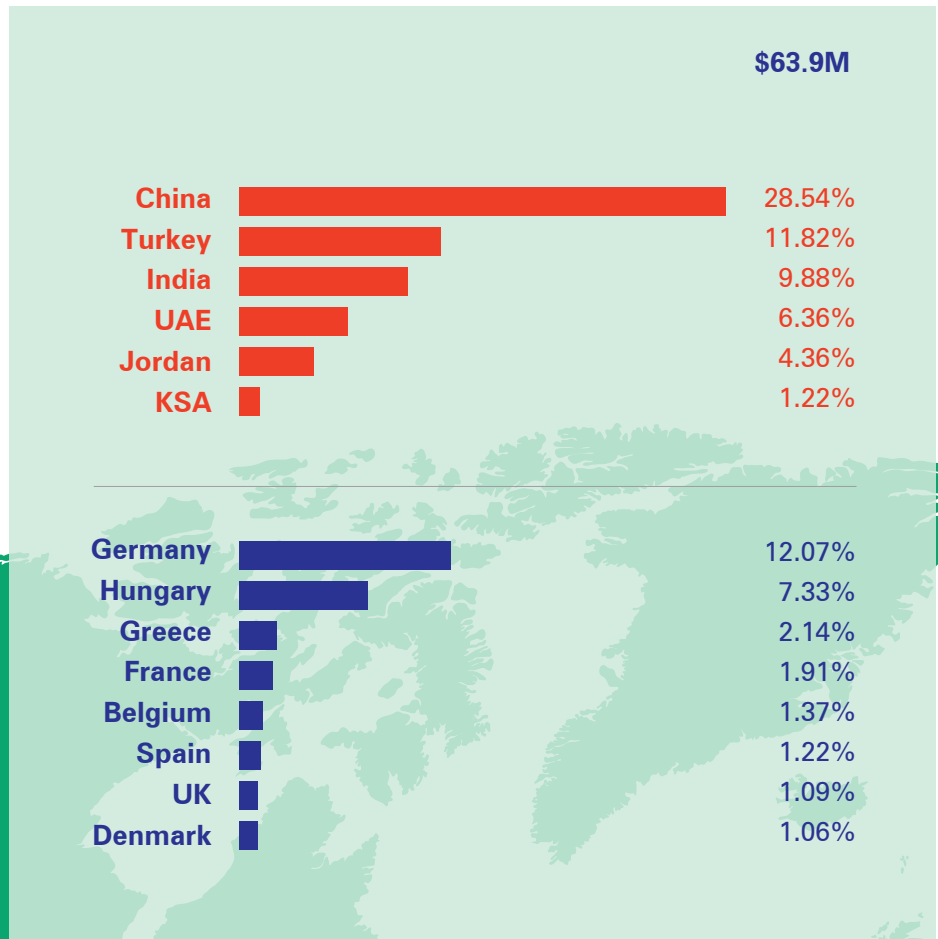
Figure 1:
Countries from which Iraq imports its pesticides



Asia



Europe



It's important to know that global agro-chemical corporations have different production sites and may consist of conglomerates of different companies.

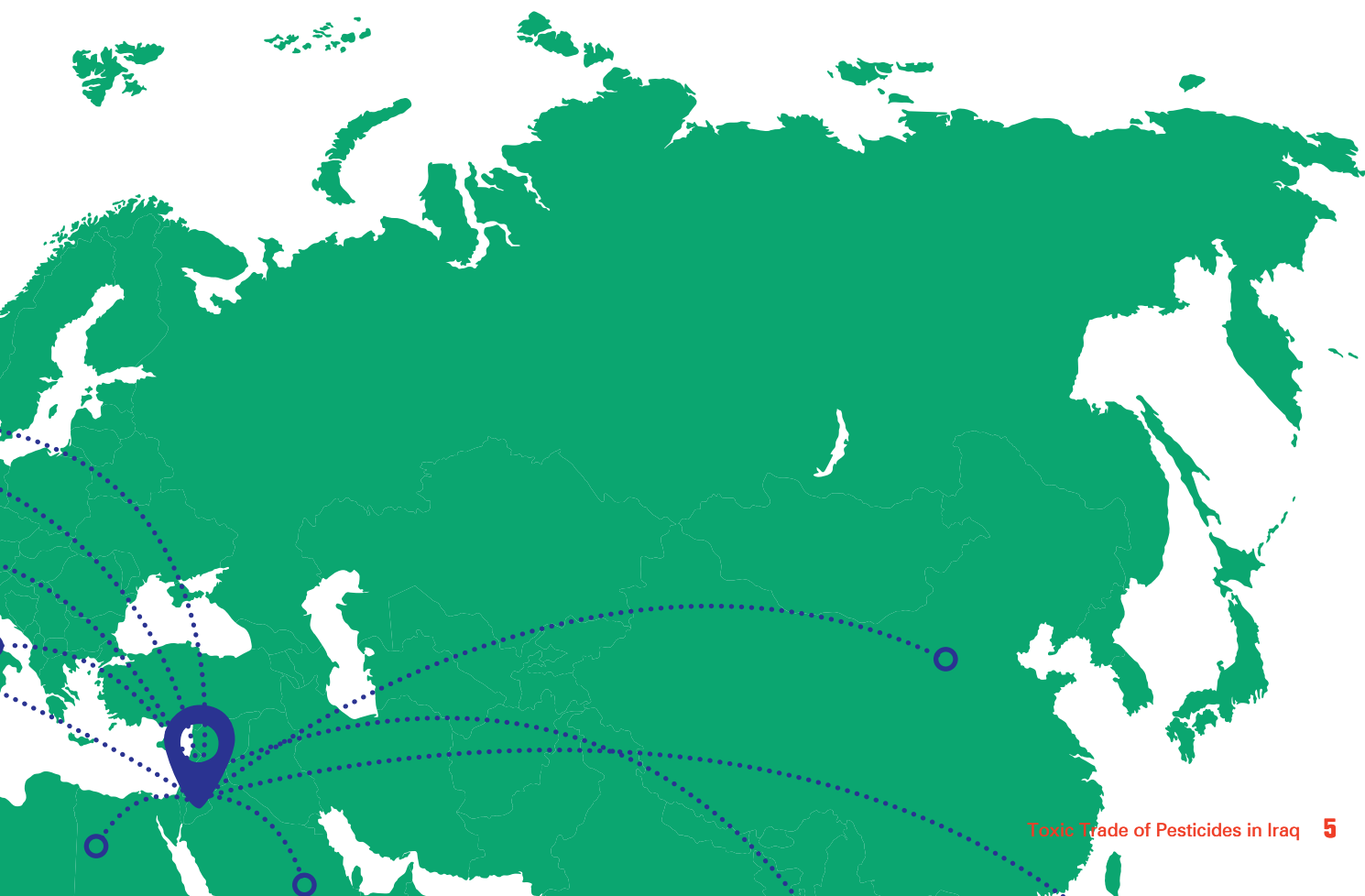
Therefore, when Hungary is listed as an importer of pesticides to Iraq, it is mainly in reference to the global company **Syngenta**, listed as **Syngenta Agro AG** in Iraq, which operates and exports products from Hungary.¹¹ Additionally, while **Bayer** is directly present in Iraq, it also has different subsidiaries, including the Jordanian company **Shadko** and the Lebanese company **ARD**, that handle the market and sell Bayer pesticides in Iraq. Syngenta also operates through the Lebanese companies **Green Gold** and **Daban**, and markets its products through three Iraqi subsidiaries: **Dabana for modern agriculture, Arjimatko and Almiqdadi**.

ONLY
15% OF PESTICIDES
ARE STILL PATENTED TODAY

Chinese pesticides are managed directly through Iraqi companies rather than Lebanese or Jordanian ones:¹²

1. **Shangdong Binnong Technology** through Iraqi sub company Beit al-Zira'i
2. **Zhejiang Heban** through Iraqi sub company Beit al-Zira'i
3. **Pilarqum Company** (Shanghai) through Iraqi sub company al-Miqdadi
4. **Aprochem Company** through Iraqi Al-Reef al-Khadra
5. **Sina Agro** through Iraqi company Chrome al-Rafidain

It is important to understand that many of the active ingredients sold today have been developed and sold by large corporations, like Bayer and Syngenta, whose history goes back to the nineteenth century. That said, only 15 % of pesticides are still patented today,¹³ which allows a diverse range of companies to sell pesticides for their own profit. The active ingredient Glyphosate, for example, was developed by Bayer (previously Monsanto), but the patent expired in 2000. This explains why, in Iraq, Glyphosate is mainly registered and sold by Chinese companies, like Shangdong Binnong Technology, and Indian companies, like Willwood or Parjat, and even Turkish companies.



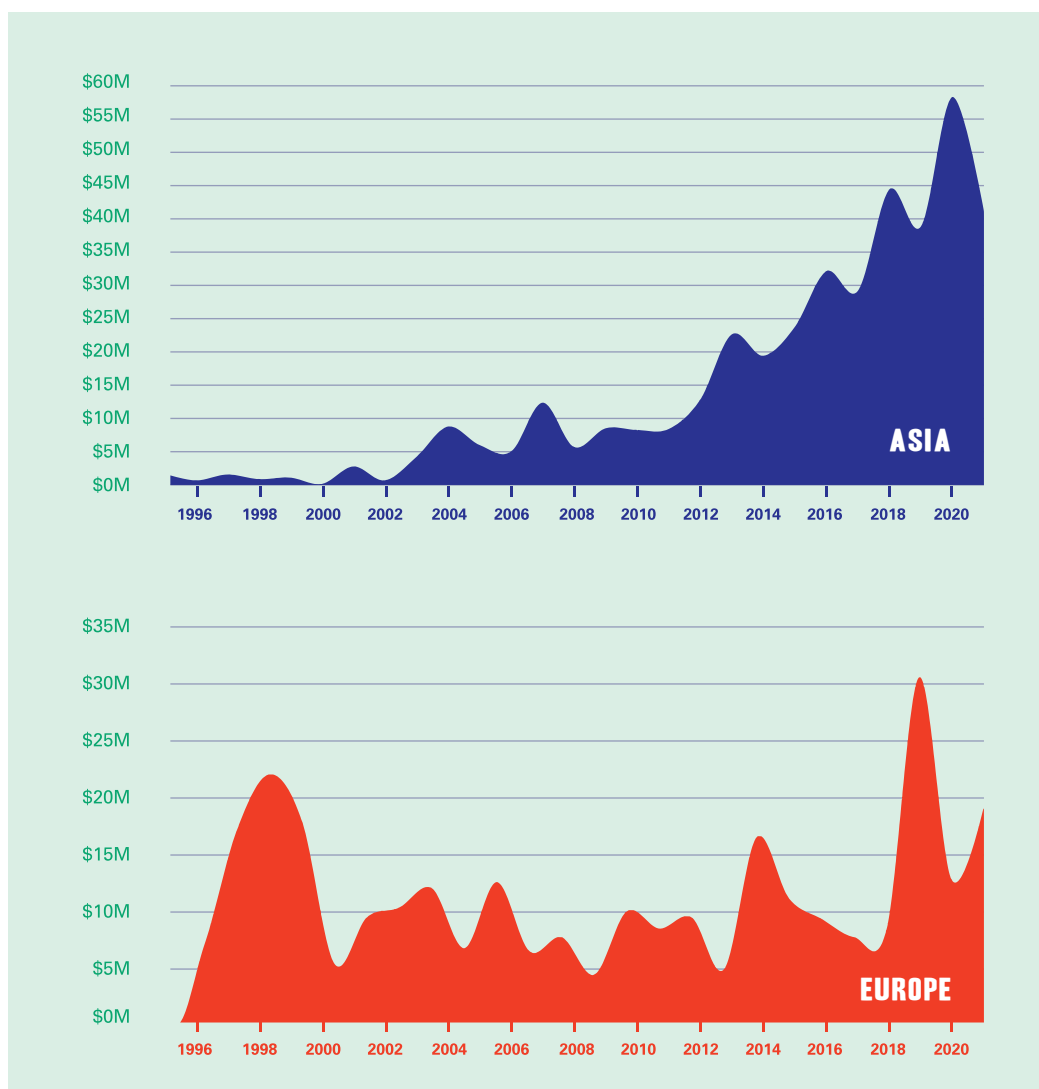


***Glyphosate** was developed, patented, and circulated in the market in the 1970s by the American Company Monsanto, which is the German company Bayer today. Glyphosate has been one of the best-selling herbicides globally, although it sparked controversies. In 2015, the International Agency for Research on Cancer (IARC) classified the chemical as “probably carcinogenic to humans.”¹⁴ Toward the end of 2022, Bayer applied to renew the license of Glyphosate in the EU and in Germany; it was granted despite major controversies.*

The Turkish company Agri Sciences mainly manages the imports to Iraq from Turkey. Looking at Turkey’s trade flow reveals that the country is simultaneously a major importer of pesticides from Europe, China, and India and a major exporter of pesticides to smaller neighboring countries. Turkey has an import value of USD 453 million from France (22.11%), Germany (16%), Spain (10%), India (9.8%) and China (7.8%). Turkey also exports USD 171 million in pesticides to neighboring countries in the Middle East and Asia, notably Azerbaijan (15.3%), Georgia (4.42%), Iraq (4.42%), Uzbekistan (4.34%), Iran (4%), Syria (3.8%), Egypt (4%), etc.

The import of pesticides to Iraq has risen continuously, especially after 2003, and again in 2011, which indicates an emergent market. Imports from China supersede imports from Europe, a trend that started in 2007 when European pesticide imports were USD 6.52 million versus USD 12.6 million, nearly the double, for Asia.

Figure 2:
Pesticides import to Iraq 1996-2020



4

HIGHLY TOXIC PESTICIDES IN IRAQ

In 2021, FAO calculated that the value of pesticide imports to Iraq was worth USD 33.843 million. Nearly all, the worth of USD 29 million, are considered Highly Hazardous Pesticides by FAO. The share of pesticides classified under the Rotterdam convention was USD 4 million.¹⁵



Iraq adheres to two important international conventions on the trade with pesticides. Iraq passed Law No.45 of 2015 to make the adherence to the **Stockholm Convention on Persistent Organic Pollutants** legally binding under international law, and to ban certain organic pollutants.¹⁶

In addition, Iraq adheres to the **Rotterdam Convention on the Prior Informed Consent (PIC) Procedure for Certain Hazardous Chemicals and Pesticides in International Trade**. The Convention states that countries must give active consent when importing certain active ingredients from exporting countries.¹⁷

There are different classifications to assess the toxicity of active ingredients in pesticides. This study relies on three internationally acknowledged classification schemes:

1. The WHO Recommended Classification of Pesticide by Hazard

This classification is mainly based on the oral and dermal toxicity of pesticides. It defines the most dangerous pesticides according to the following classes:¹⁸

CLASS 1a
Extremely
Hazardous


CLASS 1b
Highly
Hazardous

CLASS 2
Moderately
Hazardous

2. Banned in the EU

"Pesticide active substances can be banned at EU-level if they do not meet the safety criteria to protect human or animal health, the environment or ground water."¹⁹

The EU database can be found here:

 [EU Pesticides Database - Active substances \(europa.eu\)](https://europa.eu/european_council/en/eu-pesticides-database-active-substances)

3. The International Pesticide Action Network (PAN)

PAN publishes a list and classification scheme of Highly Hazardous Pesticides (HHP) based on the WHO and the EU classifications and expanding on them based on the following four factors:²⁰

1. **High Acute Toxicity** (includes WHO 1a and 1b)
2. **Long term toxic effects** (includes carcinogenic, according to the IARC; EU guidelines; Japan guidelines; Globally Harmonized System of Classification (GHS)'s labelling of hazardous chemicals)
3. **Endocrine Disruptors** which are toxic to human reproduction, according to EU/Japan/GHS
4. **High Environmental Concern/Hazard to Ecosystem Services/Known to Cause a High Incidence of Severe or Irreversible Adverse Effects** (based on such international agreements as the Stockholm Convention)

In Iraq, there is a national approval process for the use of pesticides. Currently, the list of approved and registered pesticides is 414. The list also provides information on active ingredients, subsidiaries/distributors, and manufacturers. The process of testing and examination involved multiple steps, according to the Department of Plant Protection in Abu Ghreib, some thirty kilometers west of Baghdad:



The Committee is responsible for registering pesticides, approving them, and certifying their circulation inside Iraq, whether they are from local or international origins. Companies operating in Iraq apply for pesticide registration. The application is examined, experiments are conducted, then a decision is issued to allow its circulation. [...] We had 18 visits outside of Iraq. We went to India to check the factories there. We see how they make the pesticides, and we see also how the pesticides are used in the field. We visited all the countries from where we import the pesticides.²¹

Four hundred fourteen pesticides are registered and approved in Iraq. Six pesticides among them qualify as “extremely hazardous” and “highly hazardous”, according to the WHO classification. Apart from Tetfluthrin and Abamectin, their active ingredients are also not approved in the EU.



SIX “EXTREMELY HAZARDOUS” AND “HIGHLY HAZARDOUS” PESTICIDES IN IRAQ ACCORDING TO WHO:

Active Ingredient	Main Company	Subcompany/ Distributor to Iraq	Market Name of Pesticide
BRODIFACOUM	Vebi (Italian) / Yemame (Jordanian) /Ensytext	Green Gold (Lebanese)	Murin Facoum Block BB / Letal Wax Block BB / Letal Pellets PR / Rodenthor Soft Bait RB /
BROMADIOLONE	Belgagri (Belgian)	ARD (Lebanese)	Control Block BB
ABAMECTIN	Astrachem (Saudi)	Astrachem (Saudi)	Transcat EC
DIFENACOUM	Company ZAPI. S.P.A (Italian)	Dabbana (Iraqi)	Agrigard Pellet GB
FLOCOUMAFEN	BASF (German)	ARD (Lebanese)	Storm Block & Pellet
TEFLUTHRIN	Syngenta (Swiss-Chinese conglomerate)	Green Gold (Lebanese)	Force G



Bayer has 32 registered pesticides for sale in Iraq. These pesticides often have the same active ingredients. The following active ingredients in the pesticides that Bayer sells in Iraq are **banned** in the EU:



DIFETHIALONE

COUMATETRALYL

IMIDACLOPRID

Two other active ingredients produced by Bayer are allowed in the EU; however, they are classified as **Highly Hazardous** Pesticides by PAN:



DELTAMETHRIN

FLUPYRADIFURONE



Syngenta has 52 registered pesticides in Iraq. The following five active ingredients by Syngenta are both **banned** in the EU and listed as **HHP** by PAN:



THIAMETHOXAM

LUFENURON

TEFLUTHRIN

TRIASULFURON

CHLOROTHALONIL



At the same time, Syngenta is visually present at the Directorate of Plant Protection within the Ministry of Agriculture in Abu Ghreib. A clock, calendars, a hand sanitizer all adorned with Syngenta's logo, hung on the walls of the state institution. During an interview in the Directorate, the person stated: "Syngenta won the bid for protecting the strategic crop of wheat." Further details were not given.

Figure 3:
Syngenta Merchandise at the Directorate of Plant Protection, Abu Ghreib

CHINESE COMPANIES

The following toxic ingredients were imported from **Chinese Companies**:



CHLOROTHALONIL

Banned in EU, HHP (PAN)

Yifan Biotechnology through Beit al-Zira'i



EMAMECTIN BENZOATE

HHP (PAN)

Jiangsu Suban Company through Beit al-Zira'i



- **PYRIDABEN**
- **HEXYTHIAZOX**

HHP (PAN)

Sina Agro through Chrome al-Rafidain



DATES OF IRAQ

For agricultural crops, like dates, and strategic crops, like wheat, the government executes its own plant protection program. For dates and palm trees, the ministry of agriculture dispenses pesticides by aircraft. An employee in the Directorate of Plant Protection in Abu Ghreib explains, "the ministry has seven helicopters, bought in 2010. We use them to kill insects [...] mainly, we used them to stop the Dubas bug (palm leafhopper), but when we stop it, it comes back."²² In 2006, the government used nine helicopters for a USD 1 million aerial spraying program that covered 750,000 square kilometers in the four provinces of Basra, Muthanna, Dhi Qar, and Maysaan.²³ During the 20-day campaign, residents were warned to take care of their food and water stores.



THIAMETHOXAM

The active ingredient for aerial spraying is **Thiamethoxam** which is sold as **Actara** by Syngenta through the Lebanese subsidiary **Green Gold**. It is classified as a **HHP** and is **not allowed in the EU**. Thiamethoxam is an insecticide that is highly toxic to the environment, especially to wild bees and honeybees.²⁴

Aerial spraying is not allowed in the EU because of its "potential to cause significant adverse impacts on human health and the environment."²⁵ This hazardous potential comes with aerial spraying as the risk of pesticides drifting to non-targeted areas is too high. Spray drift affects both the ecosystem and the humans who live in the vicinity of spraying; they could be exposed to pesticides directly, but also indirectly through pesticide residues in food and water.

A 2009 study by the International Center for Agricultural Research in the Dry Areas (ICARDA) shows the potential to control the Dubas bug through Integrated Pest Management, which makes it possible to shift away from the use of chemical pesticides. "The analysis indicates that it is possible to increase farmers' incomes by USD 37.6 million, if all palm producers in Iraq shifted from the use of chemical methods of controlling the Dubas bug insect to bio-pesticide methods of control when the date price is IQD 600,000 per ton."²⁶



WHEAT AND SUBSIDIES: BAYER PROFITS FROM IRAQI GOVERNMENT SUBSIDIES

When it comes to strategic crops, especially wheat, Iraq not only guarantees to buy the wheat each year at the agreed price from farmers, but also provides pesticides and fertilizers for free. Despite the claim that free pesticides support farmers, the reality is that pesticides rarely reach farmers due to high levels of corruption. Farmers complain that they either do not receive anything or that the local offices of the Ministry of Agriculture sell the products on the market rather than distributing them for free.²⁷ In any case, these subsidies, which are intended as a support to farmers, turn out to be toxic deliveries. In 2021, the government distributed 50 tons of the active ingredient **Tebuconazole (Raxiel)**, which is registered by **Bayer**, to farmers, according to Iraqi sources.²⁸ In 2020, the number was even higher, 100 tons.²⁹ This active ingredient is classified as HHP for its acute toxicity, is "fatal if inhaled," and has long term effects, both as a carcinogen and for its toxicity to human reproductive health.

5

ILLEGAL TRADE AND PESTICIDE PRODUCTION IN IRAQ

The reality of the market in Iraq is different from what is officially acknowledged, as registered and approved pesticides do not represent the full picture of the Iraqi market. Upon visiting different local agro-chemical shops in Baghdad and Yousefia, it became clear that different kinds of products and active ingredients were available on the market, many of which have not been listed as registered pesticides in Iraq. In particular, the active ingredient **Paraquat** was found in different local agrochemical retailers. This pesticide, which is found but not registered in Iraq, is **banned in the EU** and classified as a Class 2 pesticide, according to the WHO. Paraquat was introduced to the global market in 1962. Today, it is mainly Syngenta that exports it globally.³⁰ Paraquat is “highly toxic to humans,”³¹ and had led to 138 reported deaths between 2010 to 2019 in Brazil.³²



PAN Germany notes other dangerous effects: “The level of exposure to paraquat which workers may experience is high enough to lead to absorption resulting in acute poisoning. High levels of paraquat found in the urine of exposed workers indicate a considerable risk of poisoning. Paraquat’s potential damage to skin, and its absorption through skin, is therefore serious.”³³

Figure 4:
Active ingredient Paraquat found in Iraq

The difference between what is officially registered and allowed in the country and what is available on the market is common sense in Iraq. This difference is openly acknowledged in one of the interviews conducted in the University:



As for commercial pesticides of unknown origin, they are widely circulated on the market. There is no control from the responsible authorities, despite the formation of a higher committee from the Ministry of Interior that includes members from the Ministry of Agriculture. The Ministry of Agriculture does not deny the existence of these pesticides because it lacks control over the commercial market for the sale and circulation of pesticides.³⁴

Because of the lack of control over the pesticide market, highly toxic products may enter the country illegally and be sold to farmers, without any regulation or information on their dangerous effects.

PESTICIDE PRODUCTION IN IRAQ: “NO ACTION IS TAKEN”

Besides illegal trade, there are also pesticide production centers in Iraq that are also tied up with the security situation, lack of state control, and the large informal economy. It has been challenging to get an overview of the number of these production centers and how they operate. That said, the company Joud is a well-known Iraqi producer of pesticides that is under the directive of the Holy Shrine of Abass. In an interview with the Directorate for Plant Protection in Abu Ghreib, it was confirmed to the author that on different occasions Joud did not comply with the safety standards pertaining to production set by the Ministry, which is why it had been closed a few times.



Figure 5:
Sign of Directorate
of Plant Protection,
Abu Ghreib

The fact that Joud can re-open its facilities and re-launch the production easily indicates that there are challenges to execute the orders and decrees of the Ministry. The Ministry of Agriculture tries to inform the Ministry of Interior and the National Security about non-registered pesticides and the illegal, local production centers, but almost no action is taken:



We wrote complaints to National Security. They said they do not have any power over this. This is not in their hands. Even if the judge orders the shutdown of illegal pesticide production centers, some merchants just open a new company under someone else's name. Not only do they run away from paying taxes, but they also mix their own pesticides. And we do not know the active ingredients of these pesticides.³⁵

Joud Company was part of the 14th Agricultural Week exhibition (14th -21st of March 2023), presenting and selling pesticides where the active ingredient was not stated. When the author of this study queried Joud about the missing active ingredient, the response was simply that it is trade and marketing secret. It goes without saying that not stating the active ingredient, or any other ingredient for that matter, goes against Iraqi law and international conventions, like the FAO code of conduct, because the withholding of such information potentially exposes people to toxic ingredients without their knowledge. Besides Joud, there are other companies on the Iraqi market which also do not state the active ingredients on their products.

Interviews with traders and owners of agro-chemical shops reveal that companies, like Joud, import active ingredients, repackage them, then sell them as their own products on the market. Salespeople in local agro-chemical shops explain other practices to make a larger profit. One says, "I know that many offices mix up pesticides. Sometimes they would just dilute some pesticides with water, but sometimes they create their own mixes."³⁶ These practices, along with the unregulated handling of pesticides, expose the salespeople and primarily the farmers to unknown amounts and types of toxic matter.

Prior to 2003, these local production centers in Iraq, including Joud, did not exist, and pesticide production in Iraq was largely state controlled. The state-owned company Tariq, which no longer exists today, belonged to the Ministry for Industry; it produced, among others, pesticides. During the 10-year period of sanctions, the import of pesticides was severely curtailed, which forced the Ministry to produce "environmentally friendly pesticides"³⁷ to support the farmers in dealing with pests and diseases. After 2003, and more so when the security situation in Iraq began to stabilize in 2010, the market for pesticides began to develop and has grown to this day.

After the US invasion of Iraq in 2003, the pesticide trade got caught in the web of missing state regulation, systemic corruption, and absent rule of law. The personal experience of a lecturer at the University in Baghdad reflects what this means for the pesticide trade today. Doctor Fatima (a pseudonym) explained how she and her friends were driving, one day, when another car drove into them.



It was obviously the fault of the other driver. There was also a traffic officer standing by. Then, the man got out of his car and started yelling and accusing us, so I immediately locked the car from the inside. We were terrified. We were two women alone. The traffic policeman walked away even though he saw that we were in the right. Who can blame him? Maybe he has a family and needs to protect himself. He could not enforce the law. We were on our own. The best thing to do is not get into a confrontation with the man who was now shouting at us. In the end, my friend called her husband who came and talked to the person who bumped into us. You see, this is the situation in Iraq. The state knows and sees unlawful things, but who can do anything about it? We know what kinds of pesticides are circulated, but there is little we can do about it. ””

Figure 6: Lack of state control in Iraq

6

FARMERS AND PEASANTS: STILL NO STATE IN SIGHT

NO VISIBILITY AND SUPPORT FROM THE STATE

2003, the year of the US invasion, is a turning point for farmers, especially when it comes to the presence and role of the state, that is, its visibility, services, and the support it provides. Farmers explain that before 2003, there were agricultural extension services and local branches of the Ministry of Agriculture nearby. But all this changed dramatically after 2003. “We do not see anyone from the state or the Ministry of Agriculture. Before 2003, we were provided with seeds, fertilizers, and pesticides; there were [also] agricultural extension services, and we could ask about pests or diseases.”³⁸ Every time that the author of this study asked the farmers about the state, merely a laughter was the response to a ridiculous question. The lack of state visibility and support does not only prevail in the central areas of the country but is also true for the Kurdistan Region of Iraq.³⁹ In the Ministry of Agriculture’s Directorate of Plant Protection, the lack of agricultural extension services is not denied; rather, it is admitted as an obvious fact and a part of the general political situation in Iraq.



Figure 7:
Sign of Directorate of
Agricultural Extension
and Training, Abu Ghreib

While the state collapsed and can no longer fulfill its former functions, the private sector has fully taken over and dominates the field today. Instead of going to the local branches of the Ministry of Agriculture, farmers explain that they now seek the local agro-chemical retailers for advice and solutions on pests and diseases. These shops, however, act in the interest of business and, therefore, agro-chemical companies. This is also the case for seeking advice on seeds.⁴⁰ Moreover, most salesmen in the retail shops are not qualified and simply do not have knowledge about the safe and correct use of the different pesticides, as this one interviewee explains:



According to the law, agro-chemical retailers must obtain a license to open a shop. The condition is to be a graduate of the Faculty of Agriculture, specifically of the Department of Plant Protection. However, many agricultural shops in Iraq violate these rules. Of course, there is no state control or regulation on this. The people who sell pesticides have little knowledge of the safe use and danger of pesticides.⁴¹

In the context of the five interviews conducted at retailers in Baghdad and Yousefia, only one person had an actual degree in agriculture. In one shop, the salesperson proclaimed that his father had a bachelor's degree in agriculture and that he inherited the shop from him. This situation proves dangerous when it comes to the safe use of pesticides and the health of farmers and peasants.



Figure 8:
*On Farmland in Yousefia,
Surroundings of Baghdad*

POISONING LAND AND PEOPLE

ILO reports demonstrate the desperate situation of agricultural laborers who work with pesticides in Iraq:



Workers are exposed to serious potential biological and chemical hazards. Most non-owner workers (78%) are not familiar with the type of chemicals used around [the] workplace, nor [are] [they] trained on handling those. [...] There are frequent incidents of fire, especially during hot seasons, with no fire extinguisher in place. Officials interviewed reported cases of explosions due to war remnants.⁴²

Interviews conducted for this study reveal that agro-chemical companies do not follow through with human rights due diligence when it comes to the safe use of their products. Farmers report not having received any trainings on how to use pesticides safely. Additionally, some pesticides have no safe use instructions on the labels. Farmers receive most of the information on how to use the pesticide from the local agro-chemical retailer, who is not necessarily an expert in the field. The prevalence of small-scale family farming in Iraq means that the use of pesticides especially endangers the health of families and children who are often in the fields.

In Yousefia, an interviewed farmer explains how he has immediate symptoms after spraying: "I get red eyes, cough, and sometimes feel it in my chest. We do cover our faces with scarves, also because of the heat, and try not to spray when its windy." In interviews, farmers expressed that they used pesticides more than double the allowed amount, according to safety instructions, until they see an end to the infection of their plant.⁴³

Further studies show the toxic effects of pesticides on the environment, particularly in the Tigris-Euphrates Delta which has become a major source of pesticides flowing into the Shatt Al-Arab River,⁴⁴ and on human health. According to a 2023 report by the Iraqi Observatory for Human Rights:



These toxins and chemical pesticides, commonly used in fishing, have transformed the waters of the Euphrates and Tigris rivers into "a swampland for whatever is harmful," as environmental activist Ahmad Hamdan Al-Jash'ami worded it. Speaking to the Iraqi Observatory for Human Rights, Jash'ami added, "this problem is plaguing the residents of districts and cities adjacent to these rivers. It has led to a significant increase in the cases of cancerous diseases among them, as well as other illnesses such as bilharzia, malaria, chickenpox, and skin and digestive diseases, which has, in turn, led to record high fatalities amongst these residents as well."⁴⁵



TO IRAQI CIVIL SOCIETY

- Establish PAN in/for the Middle East (Iraq)
- Create an observation body on the trade and use of HHPs in Iraq
- Raise awareness on the safe use of pesticides and promote agro-ecological methods
- Organize activists to push for food sovereignty in Iraq
- Conduct studies on pesticide residue Levels in food and vegetables and the environmental effects of pesticide use in Iraq



TO THE IRAQI GOVERNMENT

- Issue a law to ban active ingredients listed as HHPs or banned in the EU
- Stop spraying HHPs on date palms by aircraft
- Stop subsidizing pesticides, specifically HHPs
- Provide independent agricultural extension services and curb the power of agribusinesses



TO THE EU

- Stop the export of HHPs from the EU (to Iraq, the Middle East)
- Strengthen international conventions that ban and restrict the trade in HHPs

8 ENDNOTES

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