

CASE 08 of the GLOBAL NET – STOP THE ARMS TRADE (GN-STAT)

Chemical Weapons in War Full Report

by Wolfgang Landgraeber with a contribution by Jürgen Neitzert

Translated from the original German by Ruth Rohde

Date of Publication: 03.25 Document Version: 03.25

Table of contents

Chemical Weapons in War 1
Full Report1
Introduction: From mustard gas to Novichok - What are chemical weapons and how do they work?
Part 1: Mustard gas in the First World War 6
Part 2: Spain's chemical weapons war in Morocco (1921-1927) 7
Spain's colonial policy in northern Morocco7
The second Rif War8
The Rif Republic8
Chemical weapons against the Rif Republic9
France's role in the Rif War10
Effects of the poison war in the Rif11
Part 3: Poison gas in Italy's war against the former Abyssinia 12
Extent of the use of poison gas14
Part 4: Chlorine gas in the so-called Dersim massacre of 1937-1938 in Türkiye 16
Part 5: Chemical warfare agents in the Sino-Japanese War 1937-1945 18
Part 6: Mass produced, but not used: Gaddafi's poison gas in Libya
Part 7: Mass murder of Kurds in Iraq in 1988 using toxic weapons
Part 8: Poison gas in the Syrian civil war
Part 9: Beyond the war effort: Poison attacks on political opponents in Russia, Jordan, Palestine, Malaysia and Iran

Introduction: From mustard gas to Novichok - What are chemical weapons and how do they work?

Chemical warfare agents are considered weapons of mass destruction. They consist of toxic chemicals such as chlorine compounds and are absorbed by the human organism through the skin, mucous membranes or the air we breathe. Depending on their composition and toxicity, they damage the blood, nerves, lungs and other organs. In armed conflicts, their use is intended to weaken the fighting power of the military opponent, incapacitate him or kill him outright. Toxic gases have often been used against the civilian population in conflicts since the First World War, in which they were used on a massive scale to break their resistance to the aggressor and poison their living environment for a limited time or permanently. Chemical warfare agents are relatively cheap to produce. This makes them attractive for countries that do not have technologically advanced weapons. At the same time, their use is associated with certain risks because, depending on wind direction and other climatic conditions, they can jeopardise a country's own troops if they do not have adequate and rapid protection against them. While chlorine gas was still the chemical weapon of choice in the First World War, thousands of tonnes of defoliants such as Agent Orange were used in the Vietnam War to enable US troops to view Viet Cong troop movements from helicopters. The use of these chemicals not only led to huge environmental damage but also to thousands of birth defects in the North and South Vietnamese population. Toxic warfare agents were refined further and further in subsequent years and made "deadlier".

However, the history of chemical weapons is also characterised by attempts to ban them and get rid of them for good - in vain. As early as 1899, a ban on chemical weapons was agreed at the Hague Conference and formulated in an annex to the Hague Convention, which did not prevent the neighbouring countries of Germany and France from attacking each other with precisely these weapons just 15 years later which prompted other states to also use chemical weapons in many other conflicts, as we will show.

In 1925, following the terrible experiences with chemical weapons in the First World War, there was another attempt to outlaw them. The Geneva Protocol, which was gradually joined by most countries in the world, banned the use of asphyxiating, poisonous or similar gases and bacteriological weapons in war. Again, belligerent states did not adhere to it or tried to cover up the use of chemical weapons with thousands of victims. Examples include Spain and Italy in their colonial wars in Africa or Türkyie in its internal conflicts with the Kurdish minority in the country. A new convention was needed, but it would take many more decades before it became a reality. In 1997, an agreement between most member states of the United Nations finally came into force, banning the development, production, possession, transfer, stockpiling and use of chemical weapons. To date (as of 2024), it has been ratified by 193 states, including all EU countries and the major military powers USA, Russia and China. Only four countries have not joined the convention: Israel, Egypt,

North Korea and South Sudan, which only became independent in 2011 and has since been torn apart by a conflict between competing warlords. Despite being banned by almost every country in the world, there are repeated reports of the use of chemical weapons in internal conflicts, e.g. in Türkyie, Syria and Myanmar - formerly Burma - and in Russia against President Putin's domestic opponents. It can be assumed with certainty that numerous other countries possess chemical weapons and are therefore in breach of the ban on their possession and storage, although this is difficult to prove, as the example of Syria shows.

There are no "humane" weapons. Regardless of whether millions were killed with knives or machetes in the civil war in Rwanda or with modern weapons of mass destruction such as poison gas in Iraq - killing defenceless people in one fell swoop and in large numbers or inflicting lifelong illnesses and disabilities is always a cruel act. At the same time, there are no limits to the development of technologies that aim to do just that. This also includes chemical weapons. The fate of the Russian ex-intelligence agent and defector Sergei Skripal, who was allegedly poisoned by his former colleagues with the modern warfare agent Novichok and fought for his life in a London clinic under the eyes of a global TV audience¹ until he was saved at the last minute by British doctors, is an infamous example of the unscrupulousness of weapons developers in authoritarian states.

This GN-STAT Case No. 8 provides an overview of chemical weapons that have been used in wars and conflicts since the First World War - and of the number of victims, as far as these can be ascertained or reasonably reliably estimated.

In any case, Chlorine-based warfare agents, which mainly led to death by asphyxiation, are old technologies - which does not mean that they were not diligently stockpiled until the 1990s by dictators such as Muammar Gaddafi in Libya, but also by democratic states such as the USA. The latter only report the complete elimination of its chemical weapons to the United Nations in 2023. In the meantime, modern chemical weapons have largely replaced the old ones.

These include nerve agents such as sarin, tabun, soman, VX and Novichok. Some of these were developed before or during the Second World War and, in accordance with the doctrine of mutually assured destruction, the two superpowers, the USA and the USSR, maintained special stockpiles in the former Warsaw Pact and NATO states so that they would be quickly available for use if war broke out. In the USA, there was also a huge test site in Dugway in the Utah desert for deployment tests of C (=chemical) and B (=biological) weapons, which made the headlines several times due to accidents.² In the middle of the Cold War in the sixtiess the then Federal Defence Minister Kai-Uwe von Hassel too opted for the use of chemical weapons in West Germany in the event of war, which was kept secret until the 1980s and only brought to light through research by Cologne journalists Günter Wallraff and Jörg Heimbrecht.³

A "peacetime stockpile of the army" of 14,000 tonnes of explosive ammunition – C-warfare agents filled in bombs and grenades produced in the USA - was to be kept in secret

¹ Alexander V. Litvinenko, Wikipedia, retrieved 20 August 2024

² Wikipedia: Dugway Proving Ground, retrieved on 20.8.2024

³ NDR Radio and TV: " Deutsche Chemiewaffenpläne " from 3 May 2018, retrieved on 29 August 2024

warehouses in case of an emergency, as Wallraff and Heimbrecht researched and published in the political ARD magazine Monitor, among others.

Political reason and lawful measures for disarmament and arms control were able to prevent an unleashed war with chemical weapons at the time. But a few decades earlier, such warfare had manifested when the colonial powers Spain, France and Italy asserted their claims to power in the Maghreb and in what was then Abyssinia, now Ethiopia, with all the force they could muster and in some cases with chemical weapons. In doing so, they drew on the experiences, that enemies Germany and France, had gathered in World War I.

Part 1: Mustard gas in the First World War

In addition to chlorine gas and phosgene, "LOST", a poison from the same chemical substance group, was primarily used during the First World War. The name is made up of the first two letters of the surnames of its developers Wilhelm Lommel and Wilhelm Steinkopf. Both were employees of Fritz Haber at the Kaiser Wilhelm Institute for Physical Chemistry and Electrochemistry in Berlin, who recommended the use of this chemical to the Prussian army command during the trench warfare on the Franco-German front. LOST, also known as mustard gas because of its odour, was actually a skin poison, but also penetrated the soldiers' lungs. Depending on the amount of gas inhaled, it led to asphyxiation and death. Those who survived an attack with LOST suffered from suffocation, skin and eye diseases for years after the end of the war. The number of deaths caused by mustard gas or lost gas attacks, especially in the last two years of the war, is estimated at up to 100,000 - 1.2 million soldiers were wounded or disabled for life.⁴

There is so much literature - including scientific literature - on the use of mustard gas in the First World War, and so many television documentaries and feature films have been made (most recently the remake of Erich Maria Remarque's classic "All Quiet on the Western Front" in 2022⁵), we don't need to elaborate this issue in too much detail here.

The life story of the Jewish chemist Fritz Haber and his wife Clara Immerwahr has also made into a film.⁶ Haber provided the scientific basis for the killing and wounding of many thousands of soldiers by poison gas during the war.

Fritz Haber was called the "father of gas warfare" because of his experiments with phosgene and chlorine gas shortly after the start of the First World War. Under his leadership, the German gas troops were set up and poison gas was used as a weapon of mass destruction for the first time.

In protest against her husband's leading role in the development of mustard gas, Clara Immerwahr committed suicide in 1915. Her husband, on the other hand, justified his research with his "patriotic duty".

Because of his research on the production of fertilisers from nitrogen compounds Fritz Haber was awarded the Nobel Prize for Chemistry in 1918. His leading role in the development of toxic gases apparently played no role for the Nobel Committee.

⁴ Federal Agency for Civic Education and BICC - Bonn International Center for Conversion: Weapons of mass destruction - Chemical warfare agents in use, retrieved on 20.8.2024

^{5 &}quot;Im Westen nichts Neues", feature film Germany, USA, Great Britain 2022, directed by Edward Berger, 148 min.

^{6 &}quot;Clara Immerwahr", TV film by Harald Sicheritz, Germany/Austria 2014, 90 min.

Part 2: Spain's chemical weapons war in Morocco (1921-1927)

by Jürgen Neitzert

Spain's colonial policy in northern Morocco

Until the end of the 19th century, Morocco had remained relatively untouched by colonialism. However, this was to change dramatically in the 20th century. Morocco had natural resources and was strategically located on the Mediterranean and Atlantic. In northern Morocco, two small enclaves, Melilla since 1497 and Ceuta, previously Portuguese, had been in Spanish possession since 1668. However, Spain waged several wars to expand its territory in northern Morocco. In the Spanish-Moroccan War in 1859 and 1860, the Kingdom of Spain fought against the Sultan of Morocco for the first expansion of Spanish possessions in North Africa. The Rif War of 1893 between Spain and the Berber tribes of the Rif mountains in northern Morocco was ended by the Treaty of Fez, the then capital of Morocco, in 1894.

This was followed in 1909 by the Rif War, which also took place between the Berber tribes of the Rif - also known as Riffians after an Arabic word - and Spain and in which Spain succeeded in expanding its territory slightly. Berber is a collective term for many ethnic groups in the Maghreb. The indigenous inhabitants of the Rif Kabyle called themselves Amazigh.

The Sultan of Morocco now attempted to consolidate his rule over the Riffians. These Berber tribes revolted against him and went to war, allowing France to take advantage of this and intervene militarily in Morocco. Germany also had an interest in Morocco; after all, the Mannesmann Group had many mining concessions and other legal titles throughout Morocco, especially in the Rif Mountains, where rich mineral resources were suspected. As in the First Moroccan Crisis (1904-1906), Germany once again intervened politically, which led to the Second Moroccan Crisis, but later had to allow France's dominant influence in Morocco.

Following the Treaty of Fez on 30 March 1912 between the Sultan Moulay Abdel Hafid of Morocco and France, the protectorate of French Morocco was established. Although the Sultan remained head of state, he lost a great deal of power. Under the subsequent Franco-Spanish Treaty of 27 November 1912, Spain was awarded the coastal area on the Mediterranean and the Rif Mountains in northern Morocco as well as a small area around the city of Tarfaya in the south. In this treaty, France ceded 5% of Moroccan territory, i.e. around 20,000 square kilometres, to Spain. Spain established the protectorate of Spanish Morocco with Tétouan as its capital. This was also the beginning of the resistance of the Riffians against the Spanish, which triggered a conflict that would drag on for years.

The second Rif War

From 1920 onwards, Spain attempted to extend its rule to the entire colonial territory granted to it after the First World War. This was because France threatened to add the north of Morocco to its protectorate. The Spaniards conquered the city of Chefchaouen, also known as Chaouen or Xauen, in the west of the Rif. The conquerors also attacked the local mosques and treated the Riffians - the indigenous, predominantly Sunni Berber tribe in the Rif mountains - with contempt.

Abd-el-Krim

From 1921, Spain hastily attempted to advance further. However, they did not reckon with the locals, who were anxious to preserve and defend their own authority and culture. This led to the unification of several Berber tribes under Mohammed Abd al-Karim al-Khattabi. He belonged to the powerful Beni Urriagel tribe. Before the First World War, he was the cadi (Islamic judge) of Melilla and worked for the newspaper El Telegrama del Rif, where he initially took up a position for Spain as protector and investor in the Rif region. However, he was later imprisoned for a year for high treason because he propagated independence from Spain. By 1921, Abd-el-Krim had united six tribes to fight against the Spanish. On 22 July 1921, the Riffians under his leadership directly attacked the Spanish troops at Annual in north-eastern Morocco. The battle at Annual lasted three weeks, with over 13.000 Spanish soldiers killed according to official figures, and there are even reports that 35,000 men died. Much military equipment was lost to the Riffians. The strength of the Riffians. who only had a few thousand armed fighters, was due to their knowledge of the terrain and their high level of motivation. The organisation and tactics of the Riffian guerrilla fighters are considered one of the sources of guerrilla warfare theory and are repeated in various conflicts of the 20th century. Che Guevara (Cuba), Mao Zedong (China) and Ho Chi Minh (Vietnam) are said to have been inspired by the guerrilla tactics of the Riffians.

Abd-el-Krim's Berber warriors drove the Spaniards back into the enclaves of Ceuta and Melilla. Other tribes joined Abd-el-Krim. This led to an internal political crisis in Spain and a change of strategy by the Spanish under King Alfonso XIII. A large number of troops, around 150,000 soldiers, and new weapons were sent from Spain, including tanks, aeroplanes and an aircraft carrier. The Spanish air force launched aerial bombardments in the Rif region at the beginning of 1922. These aerial bombardments caused great losses among the Rif population. From mid-September 1921 to 11 January 1922, the towns of Nador, Zelouan and Monte Arruit were recaptured by Spanish troops.

The Rif Republic

After the spectacular victory in Annual, Abd-el-Krim expanded his power by founding an Islamic republic, the Rif Republic, with a government and a centralised administration in 1923. He created a parliament consisting of the tribal leaders, which also elected a government. Law was administered according to Sharia, Islamic law. Abd-el-Krim fundamentally reformed the social structure of the Riffians. Other Berber tribes joined him and he put an end to the rivalries between them.

This Rif Republic was a challenge for the European colonial powers. There were repeated battles between the Rif Republic and the Spanish, but there were also repeated conflicts

between the various Rif Kabyle tribes. However, Abd-el-Krim's troops liberated the city of Chefchaouen in 1924. This conquest and the retreat of the Spaniards were a great victory for Abd-el-Krim.

Chemical weapons against the Rif Republic

Spain had long had a bottling plant for chemical warfare agents in Melilla, which had been supplied by France. It was initially only equipped for tear gas and irritants for the nose and throat.

Germany had already supplied modern weapons to Spain in 1920, partly as a pretext for a military museum. In 1921, Spanish military personnel contacted German agencies in order to obtain chemical weapons.

On 20 August 1921, Spain applied for the delivery of mustard gas from Germany to the Spanish military via Dr Hugo Stoltzenberg, who was in charge of dismantling chemical weapons in Germany. The production of such weapons in Germany was banned by the Treaty of Versailles of 1919, but there were still many remaining stocks. The first delivery took place in 1923, and in June 1922 Spain commissioned Dr Stoltzenberg to build a chemical weapons factory near Madrid, in Marañosa, to produce poison gas itself.

Germany also had other military contacts with Spain: Planning for a factory for hand grenades and bombs came from the Carbonit company in Germany, and gas masks from the Auer company were also supplied to Spain. The German companies Junkers and Dornier built aeroplanes for the Spanish military. Junkers flying boats were used in the Rif War in Morocco from 1922 and also flew gas attacks. German lorry companies also supported the Spanish armaments.

In September 1923, following civil war-like conditions in Spain, General Primo de Rivera staged a coup d'état. With the support of the king, he became the new head of state of Spain. He developed a new strategy in the Moroccan War. He ordered the Spanish to retreat behind established lines. Then the use of chemical bombs began. Mustard gas was used for the first time in July 1923 at the Battle of Tizi Azza and dropped from aircraft during attacks - exactly one year before the Geneva "Protocol for the Prohibition of the Use in War of Asphyxiating, Poisonous or Similar Gases and of Bacteriological Agents" was signed. Various chemical substances were now used on a massive scale: Phosgene, diphosgene, chloropicrin and, above all, mustard gas. Some 127 bombers were used in the campaign, dropping around 1,680 bombs a day. A total of over 500 tonnes or 10,000 containers of mustard gas were used. The main targets were the souks, i.e. the markets and other busy places where the civilian population gathered. But farmers working in agriculture were also bombed.

The poison gas war achieved its goal. The gas remained in the valleys of the Rif Mountains for longer and had a much greater effect than when it was used on flat plains. At first it was barely noticeable, so that people could not defend themselves against it. For the victims of the poison gas attacks, the poison gas caused burning pain and wounds that were difficult to heal and usually fatal. The mustard gas stuck to food. Eating it caused ulcers on the digestive organs and ultimately led to death.

This poisoning strategy with mustard gas was planned by the German chemist Dr Hugo Stoltzenberg for the Spanish military. He also further developed the poison gas with ingredients so that it would stick for weeks. To avoid becoming victims of these poison gas attacks themselves, the Spanish withdrew far out of the country. The central Rif was evacuated by members of the Spanish army until the beginning of 1925, as was the west near Tétouan up to a fortified line.

Abd-el-Krim had asked the Red Cross in Geneva to help the victims of the poison gas war. However, Spain denied any use of poison gas, so that the Red Cross was ultimately unable to materialise.⁸

France's role in the Rif War

France had repeatedly supported Abd-el-Krim and the Rif Republic in order to curb Spanish influence. But now the attitude of the French towards the Rif Republic changed because France also feared for its position in Morocco. French troops marched into the Ouerrha Valley in 1924 and defeated the Berber tribes there without much bloodshed. The Ouerrha Valley was rich in agriculture. France then cut off the entire food supply of the Rif Republic from its protectorate. Due to the chemical contamination of nature and labour, the already meagre agriculture of the Rif Republic had come to a standstill, and agricultural products had already had to be imported from the Ouerrha Valley. They were therefore dependent on this supply of food from the French protectorate zone, and a major famine was imminent. Abd-el-Krim's troops then attacked the Ouerrha Valley, but were defeated by the French. In April 1925, his fighters launched another major offensive against the French zone in Morocco, attacking the French in the north of the Ouerrha Valley. They came within 40 kilometres of Fes, the country's capital. They also threatened an important railway connection between Algeria and Morocco, but without ever stopping it, as that was not their aim. This led to military agreements between the French and the Spanish. The French Minister of War, Paul Painlevé, met with the Spanish head of state, Primo de Rivera, in Madrid on 17 June 1925 and they decided to fight together, starting with a naval blockade. The French Marshal Pétain was sent to Morocco on 13 July 1925 with supreme command of the expeditionary forces to defeat Abd-el-Krim in unison with the Spanish. Around 500,000 French and Spanish soldiers were deployed in the rest of the war with artillery, tanks and aeroplanes. The Riffians of Abd-el-Krim, on the other hand, only had around 7,000 fighters. The French attacked from the south and drove the Berbers far beyond the Ouerrha Valley into the Rif Mountains. Thus began a war on two fronts for Abd-el-Krim, with the mighty France becoming the main belligerent. And Abd-el-Krim had to deploy forces in the south and thus weaken the north.

On 8 September 1925, Spanish troops landed in the bay of Al Hoceima, known as Alhucemas in Spanish, in north-eastern Morocco with the help of the French fleet and the air force. It was the first airborne operation in history. It is considered a precursor to the

_

Stoltzenberg, Joachim: Der Giftgaskrieger - Das Leben des deutschen Chemiefabrikanten Dr. Hugo Stoltzenberg, Kadera Verlag Hamburg 2022

⁸ Kunz, Rudibert and Müller, Rolf-Dieter: Giftgaskrieg gegen Abd-El-Krim - Deutschland, Spanien und der Gaskrieg in Marokko 1922-27, Einzelschriften zur Militärgeschichte 34, Verlag Rombach, Freiburg 1990

Allied boat landings in Normandy during the Second World War with more than 10,000 Spanish soldiers. One of the commanders was Colonel Francisco Franco, who later became the dictator of Spain.

The landing at Al Hoceima was the turning point of the Rif War and the end of Abd-el-Krim's political influence. The Spaniards destroyed the main mosque and plundered the city. Every captured Rifkabyle was executed. On 10 September 1925, Marshal Pétain's troops launched an offensive on the entire Rif region from the south. The following year, the Spanish also advanced further into the Rif. The intense battle lasted a year and ended with the victory of the French and Spanish armies over the forces of Abdel-Krim.

On 27 May 1926, he surrendered to the French in Targuist. But the war continued, including the use of poison gas. On 10 July 1927, the last tribe of Riffians ended the battle. The Spaniards had won. Abd-el-Krim was sent into exile by the French to the island of La Réunion, from where he fled twenty years later on a transport to Egypt. He did not return to Morocco, although King Mohammed V of Morocco had invited him to return to his homeland after independence in 1956. This was because Abd-el-Krim still saw Morocco's strong connection to the former colonial power France.

The protectorate of Spanish Morocco only existed until 1956, after which the Spanish troops withdrew to Ceuta and Melilla.

Effects of the poison war in the Rif

The massive use of poison gas in the Rif War served Mussolini's fascist Italy as a model for its brutal war against Abyssinia from 1935-1941 (see next chapter).

The effects of the use of poison gas in Morocco a hundred years ago can still be seen today. The contamination with mustard gas meant that the area around Al Hoceïma still has a high rate of lung cancer today. The Moroccan "Association for the Defence of Poison Gas Victims in the Rif" (ADVGT) believes that the toxic effects of the bombings in the Rif region are still having an effect today, almost 100 years later, or that mutations caused by the chemical weapons are leading to this. However, no scientific study has yet been carried out on the connection between the use of chemical weapons and the known extraordinarily high cancer rate in the region, especially lung cancer. This would be important, however, as 60 per cent of patients at the cancer centre in the Moroccan capital Rabat come from the Rif region, where the war took place 100 years ago. Many are descendants of victims of the Rif War. It is also unclear whether poison is still having an effect or whether mutations caused by the poison gas contamination are to blame.

On 7 September 2005, the Esquerra Republicana de Catalunya party submitted a bill to the Spanish Congress of Deputies demanding that Spain recognise the systematic use of chemical weapons against the population of the Rif Mountains. The bill was rejected by 33 votes to three in the Constitutional Committee of the Congress on 14 February 2007.⁹

⁹ Charqui, Mimoun: Armes Chimiques de Destruction Massive sur le Rif : Histoire, Effets, Droits, Préjudices et Reparations, Editions Amazigh, Rabat 2014

Part 3: Poison gas in Italy's war against the former Abyssinia

On 3 October 1935, the Italian dictator Benito Mussolini invaded the East African country of Abyssinia, now Ethiopia, with an army of around 250,000 soldiers in an undeclared war. He essentially pursued two goals: Italy, which had previously subjugated Libya, Eritrea and Somaliland, was to join the first guard of European colonial powers - Great Britain, France, Portugal, Spain and Germany - by incorporating Abyssinia into the Italian-East African colonial pond and exploit Abyssinia's natural resources, especially raw materials such as coal, iron ore and oil, which were vital to waging war.

Note by the author, Wolfgang Landgraeber: The following description of the Italian use of poison gas in Abyssinia is slightly abridged from Wikipedia¹⁰ because it represents a comprehensive, competent and detailed presentation based on numerous scientific sources. These are cited directly in the text - as opposed to the usual footnotes.

"Italy used three chemical warfare agents in Abyssinia: Arsenic, phosgene and yperite (= mustard gas, W.L.) which - filled into gas bombs - were dropped by fighter planes. In addition, poison gas grenades were used to an unknown extent, which were prepared on site and whose use, in contrast to the gas bombs dropped by the air force, was largely undocumented. [Matteo Dominioni: Lo sfascio dell'Impero. Gli italiani in Etiopia 1936-1941. p. 214]

One of the few documented exceptions was the heavy artillery bombardment of Amba Aradam with arsenic shells in February 1936. The Italian air force used explosive devices of various sizes and designs. Yperit, known as "mustard gas", which was the most toxic warfare agent known in the mid-1930s, played the main role. Deadly even in the smallest concentrations, Yperit is an oily and pungent-smelling skin poison that can lead to an agonising death or serious injuries within several hours. [Giulia Brogini Künzi: Italy and the Abyssinian War 1935/36: Colonial War or Total War? Paderborn 2006]

The heavy, torpedo-shaped C.500.T bomb became the symbol of the brutal Italian Yperit operation. 11 With a total weight of 280 kilograms, it contained a total of 212 kilograms of mustard gas. This large-calibre explosive device was specially developed for the conditions in East Africa and was used there, particularly on the northern front. After being dropped by fighter planes, the almost man-sized bomb was detonated at a height of 250 metres above the ground using a time fuse. Depending on the strength of the wind, a fine rain of warfare agent 500 to 800 metres long and 100 to 200 metres in diameter then fell. [Aram Mattioli: Experimental field of violence. The Abyssinian War and its international significance 1935-1941. Zurich 2005, p. 108]

¹⁰ [German-language] Wikipedia: Abessinienkrieg, accessed on 29.8.2024

¹¹ Yperite: alternative name for mustard gas, named after the French town of Ypres, where it was used by the tonne during the First World War

In line with the military successes, the air force took on the central role in the gas war. The Caproni Ca.111, Caproni Ca.133 and SavoiaMarchetti SM.81 aircraft types were built with suitable suspension devices for gas bombs. The powerful bombers were developed in 1932 and 1935 respectively, had a range of between 980 and 2,275 kilometres, had several machine guns on board and a load capacity of 800 kilograms to two tonnes. [Giulia Brogini Künzi p. 261 f.]

The use of chemical warfare agents had an offensive character from the outset, although the arsenic shells used by the artillery proved to be less effective during the course of the war than the poison gas bombs of various calibres dropped from the air. On a tactical and strategic level, the effects of the use of poison gas were enormous. Thanks to the intelligence service, the Italian armed forces were precisely informed about the routes chosen by the Abyssinian armies, when they set off and where their headquarters were located, making it possible to set up "chemical blockades" on passes or at river crossings, for example. However, the blocked areas proved to be impassable for the Italians for three to five days after a drop, which could have serious consequences depending on the time pressure of the manoeuvres. This "side effect" of the tactical use of poison gas was particularly problematic on the southern front, where Graziani urged the Italians to advance as quickly as possible. The intentions formulated at the beginning of the war not to hit the civilian population or to save the gas bombs for large targets were abandoned after just a few weeks. Pilots bombed even the smallest gatherings of people, caravans and herds of cattle with explosives, incendiary bombs and poison gas, especially on the southern front. [Giulia Brogini Künzi p. 266 f.]

The chemical warfare agents were intended to terrorise the enemy, restrict their operational planning and break the morale of the enemy units and the civilian population. On 2 March 1936, Mussolini released all Ethiopian cities for bombing, with the exception of Addis Ababa and the railway junction Dire Dawa. This decision came a few days after Badoglio had called for "terrorist action by the air force over the Ethiopian centres, including the capital". With regard to the gas warfare, Mussolini conceded to his commanders that "in view of the enemy's methods of warfare, any poison may be used in any quantity", but with regard to the bombardment of the cities, he repeated his protective directive on Addis Ababa and Dire Dawa several times, although towards the end of the campaign this was only of a formal nature. [Giulia Brogini Künzi p. 264 f.]

Abyssinia did not have much to counter the chemical warfare of the Italian armed forces. The Ethiopian army was also expecting gas warfare, but without being able to estimate the scale of the new warfare. The Ethiopian government issued instructions to the commanders on how the soldiers should behave in the event of an aircraft attack or if poison gas was suspected. To instruct the soldiers, many of whom were illiterate, German manuals on gas warfare were also translated into Amharic and provided with many hand-drawn sketches. The Ethiopian army had hardly any means at its disposal to combat the use of poison gas. The vast majority of soldiers in the imperial army had gone into battle barefoot and had neither protective suits nor special shoes or gas masks that would have kept out the fine rain of warfare agent, which could also eat through hard rubber, or allowed them to cross contaminated terrain. Only the Imperial Guard had a few thousand gas masks, but these proved to be of very little use against mustard gas. There was no

medical service in the imperial army that could have alleviated the suffering of the poison gas victims. The civilian population was defenceless against the devastation from the air. As in the rest of Africa, there were no shelters in Ethiopia, nor did the people have any rudimentary knowledge of protection, let alone gas masks. Detoxifying agents were completely absent. [Giulia Brogini Künzi p. 260; Aram Mattioli p.104f.]

Extent of the use of poison gas

It is difficult to say exactly how many poison gas bombs were used in Ethiopia in total. It is also difficult to determine which bombs were filled with which warfare agents. Alberto Sbacchi: Legacy of Bitterness: Ethiopia and Fascist Italy, 1935-1941 [Lawrenceville 1997, p. 58].

On the northern front, the air force dropped around 1,020 C.500.T bombs from 22 December 1935 to 29 March 1936, equivalent to a total of around 300 tonnes of Yperit. Badoglio also had 1,367 artillery shells filled with arsenic fired at the Abyssinian soldiers during the Battle of Amba Aradam (11-15 February 1936). On the southern front, the air force dropped 95 C.500.T bombs, 172 to 186 21-kilogram Yperit bombs and 302 to 325 phosgene bombs between 24 December 1935 and 27 April 1936, totalling around 44 tonnes of poison gas. For the period from 22 December 1935 to 27 April 1936, this results in a total quantity of around 350 tonnes of poison gas. From 1936 to 1939, around 500 more poison gas bombs were dropped on the Abyssinian resistance. Therefore, according to conservative estimates, the Ethiopians suffered 2,100 poison gas bombs or around 500 tonnes of poison gas during the entire period of the Italian war of aggression and occupation from 1935 to 1941. [Giulia Brogini Künzi p. 264; Angelo Del Boca: Yperit-Regen: The poison gas war. In: Asfa-Wossen Asserate, Aram Mattioli (eds.): Der erste faschistische Vernichtungskrieg. The Italian aggression against Ethiopia 1935-1941. Cologne 2006, p. 54; Alberto Sbacchi: Legacy of Bitterness: Ethiopia and Fascist Italy, 1935- 1941. Lawrenceville 1997, p. 59 f.]. As a consequence, historians speak of a "massively waged gas war". [Aram Mattioli p. 108.]

Most of the C.500.T-bombs were dropped on the northern front up to the First Battle of Tembia. In the battle itself, around three times fewer Yperit bombs were dropped than in the preceding period. In the period leading up to the next battle, that of Endertà, the number of bombs dropped increased massively and in the battle itself was roughly the same again as in the First Battle of Tembia. In the interval to the next battle, the number of bombs dropped increased again. In the Second Battle of Tembia, the Italian air force used relatively few C.500.T-bombs and possibly dispensed with them altogether in the Battle of Scirè. Gas warfare on the southern front was different from that on the northern front. In contrast to the northern front, several different types of Yperit bombs and phosgene bombs were used in the south. There were also many battles on the southern front, but only two major military confrontations: the capture of the village of Neghelli and during the Harrar offensive. The operations from the air always preceded those on the ground. The tendency not to limit the bombardments with C.500.T bombs to the period of the battles thus existed on both the northern and southern fronts. Gas warfare also proved to be a constant in the south. [Giulia Brogini Künzi p. 262 ff.]

A month after he proclaimed the Italian Empire in May, on 8 June 1936 Mussolini again authorised Viceroy Graziani to use poison gas to extinguish armed uprisings. By the end of November 1936, months after the official proclamation of Italian East Africa, not a month had passed without the Italian air force deploying between 7 and 38 C.500.T explosive devices over Abyssinia. [Aram Mattioli p. 108, 140 f and 145] Until Viceroy Graziani was replaced in December 1937, poison gas continued to be used regularly in all regions of Ethiopia. Under Graziani's successor, Duke Amadeus of Aosta, poison gas bombs were mainly used in the governorates of Amhara and Shewa. The commander-in-chief of the Italian troops in Italian East Africa, General Ugo Cavallero, who was in favour of Graziani's approach to eradicating the Ethiopian resistance, was in charge. [Alberto Sbacchi p. 58 f.] Yperite and arsenic grenades were also used on Cavallero's orders at the Zeret massacre in April 1939. [Asfa-Wossen Asserate, Aram Mattioli pp. 9-26, here p. 20.] As late as late autumn 1940, an Italian plane released poison gas over a rebel camp, killing five resistance fighters and seriously injuring many more. [Aram Mattioli p. 145.]

Contrary to rumours that quickly found their way into the international press, the Italian troops did not use chemical warfare agents from the very beginning of the Abyssinian War. The first missions were flown shortly before Christmas 1935 as a result of the Abyssinian counter-offensive. It was only this threatening situation that led the Italian High Command to abandon its previous considerations. [Aram Mattioli p. 104.]

Nor did the Italian air force allow Yperit to fly indiscriminately over villages, towns and cities did not deploy spraying aeroplanes to contaminate large areas of agricultural land. Mussolini assumed that these final escalations of the war would have caused more international political damage than military benefit. Although the gas attacks were mostly directed against armed units in contested zones, they were carried out without regard for the civilian population. By the end of 1936 alone, several thousand, perhaps even tens of thousands of Abyssinians were killed by poison gas, and countless others were maimed or blinded. [Aram Mattioli p. 151]. "

The British also considered using deadly poison gas in their mandated territory in Iraq for a while between the world wars. During the uprising of Iraqi rebels against British Mandate rule in Mesopotamia in 1920, Winston Churchill, then head of the British War Office, is said to have suggested its use in order to study the distribution of the gas in the air and its lethal effect on the rebels. Churchill authorised the conversion of conventional shells into gas artillery shells, but they were not used because the Disarmament Treaty of 1921/22, which was signed at the Washington Naval Conference at almost the same time, excluded the use of "asphyxiating, poisonous or other gases". Italy also took part in this conference, but 13 years later the agreement with Mussolini was as much a waste of paper as the Hague Treaty.

Land War Order for the German military leadership at the beginning of the First World War. ¹²

¹² On this and the use of poison gas in Spain and Italy, see also: Stefan F. Kreutzer, Giftgaseinsatz in den Kolonien - Militärische Notwendigkeit und enthemmte Kriegsführung zwischen den Weltkriegen,

Part 4: Chlorine gas in the so-called Dersim massacre of 1937-1938 in Türkiye

The founding phase of the modern Turkish state by Mustafa Kemal, known as Atatürk (Father of the Turks), was characterised by violence in many ways from 1923 onwards. Atatürk wanted to transform the former sultanate of the Ottoman Empire from a backward agrarian country into a modern Sunni nation state in just a few years. "One state, one language, one religion" was his programme. Minorities such as Kurds and Alevis, some with their own languages, pre-Islamic religions and traditional tribal structures with aghas (Turkish for "leaders") instead of mayors appointed by the state, were subjected to a policy of coercion against which they rebelled, prompting the new Turkish state to react brutally in some cases. There were uprisings led with firearms, for example from 1937 in the eastern Anatolian province of Dersim, which is now called Tunceli, "iron hand". The rebellious Alevi population was brought to heel by the Turkish army with an iron hand and cruel weapons. Atatürk himself had described Dersim in parliament as a "boil that must be drained" and announced a campaign of "chastisement and deportation" (tedip ve tenkli). 13 He sent around 50,000 soldiers and gendarmerie to Dersim, ordered the killing of all armed insurgents, the burning of their villages and the forcible resettlement of extended Alevi families to other Turkish provinces. Turkish soldiers carried out numerous massacres of the population. There are many eyewitnesses, such as children who survived because they had hidden in nearby forests, fled abroad with relatives and later reported on the atrocities in the German media as adults.¹⁴ They not only told of mass shootings, but also of the use of poison gas.

Recently discovered documents in the Turkish National Archives confirm their reports. In it, for example, a Turkish officer in the city of Elaziz reported on 30 March 1937, "I have requested incendiary bombs from the commander of the air artillery and poison gas and incendiary bombs from the national defence.¹⁵

The nature of the poison gas and where it came from can also be found in Turkish state documents. One of them was signed by Kemal Atatürk himself - a secret decree ordering 20 tonnes of Yperit and Chloracetophenom, including an automatic filling system, from the Turkish embassy in Berlin.¹⁶

Unter anderem in einer Reportage aus dem Jahr 1986 mit dem Zeitzeugen und späteren Außenminister Caglayangil wird geschildert, was mit dem Giftgas geschah:

Aventinus - Student. Publication Platform History, Ludwig-Maximilians-University Munich, 2012, retrieved. 31.8.2024

^{13 &}quot;The Turkish military's mass murder of Alevis", author Kemal Hür, Deutschlandfunk 21 May 2015, accessed 2 September 2024

¹⁴ e.g. "The Dersim Massacre"; author Frank Nordhausen, Frankfurter Rundschau Online from 19 January 2019 and "Das vergessene Massaker", ARD "Titel, Thesen, Temperamente", from 1 December 2019

¹⁵ Republic of Turkey, Office of the Prime Minister, Archives of the Republic, Reg. No. 263, date 31 March 1937

¹⁶ German Bundestag, 19th electoral term, Minor interpellation by members of the parliamentary group Die Linke dated 1.7.2019 Drucksache 19/11303

"They had taken refuge in caves. The army used poison gas - through the cave entrance. They poisoned them like mice. They slaughtered those Dersim Kurds between the ages of seven and seventy. It became a bloody operation. 17

Information on the number of Alevi Kurds killed in Dersim varies widely. According to government figures, there were between 10,000 and 25,000, while a scientific study by the University of Southern California Los Angeles (UCLA) puts the number of victims at between 46,000 and 63,000.18

Historians also argue over the question of whether the Dersim massacres constitute a genocide, comparable to the Armenian genocide twenty years earlier. Wolfgang Benz from the Munich Institute of Contemporary History, for example, refused to speak of genocide. He said: "Genocide has a universal intention. This means that it is directed against an ethnically, religiously or racially defined population group in its entirety." The massacres in Dersim, on the other hand, were "a regionally limited action". Genocide researcher Yektan Türkyilmaz from the Berlin Forum for Transregional Studies disagrees. The decisive factor was how the perpetrators saw their victims. "A traditional evil from the Ottoman Empire that needs to be eradicated from its roots for the sake of civilisation". 19

On 23 November 2011, Turkish Prime Minister Recep Tayip Erdogan commented on the mass killings. He apologised for the actions of the Turkish state authorities towards the Kurds, acknowledged 13,806 deaths and described the events in Dersim as the "most tragic and painful events" in recent Turkish history²⁰. Erdogan's critics, on the other hand, saw his statement as a "tactical manoeuvre".21 It should be noted that even Atatürk must have known in 1937/38 that the use of poison gas was internationally outlawed under the Geneva Protocol of 1925 - whether in internal conflicts or in wars between states.

In response to a question from the Left Party parliamentary group in the German Bundestag, the German government stated that it was aware of the supply of poison gas from German stocks, but that the historical reappraisal of the events in Dersim was the sole responsibility of the government in Ankara. There was no reason to get involved in this. At least the German government had one more detail at the ready that had previously gone unnoticed: German²² poison gas specialists had trained the Turkish army in the use of mustard gas. And the aeroplanes that dropped the poison gas bombs were also German-made: 24 twin-engine Heinkel He 111 j bombers, which were delivered by Heinkel-Werke Oranienburg from October 1937.²³ German aiding and abetting of mass murder, as in Morocco and Abyssinia.

¹⁷ Ibid p.11

¹⁸ Dilşa Deniz: Re-assessing the Genocide of Kurdish Alevis in Dersim, 1937-38. In: Genocide Studies and Prevention: An International Journal. Band 14, Nr. 2, 4. September 2020, accessed 4.9. 2024.

^{19 &}quot;Protests against reappraisal" author Hülya Gürler, in: tageszeitung (taz) v. 9.12.2019, retrieved.

²⁰ e.g. ARD Tagesschau online v. 23.11.2011, retrieved. 4.9.2024

^{21 &}quot;When Erdogan apologises for a massacre", author Jürgen Gottschlich, Tageszeitung v. 19.12.2011

²² Deutscher Bundestag, 17. Electoral period, Drucksache 17/1022 v. 18.3. 2011, accessed 4.9.2024

Part 5: Chemical warfare agents in the Sino-Japanese War 1937-1945

In 1937, a cruel conflict with chemical weapons also began in a completely different part of the world. In 1937, the Japanese Imperial Army invaded Manchuria, occupied large parts of China and installed a Japanese puppet government. During the Second World War, Japan allied itself with the Hitler regime and received weapons and expertise from it. It is not known whether LOST, mustard gas developed by German chemists in the 1920s, was part of this, but it is probable. Although Japan was still on the side of the Allies in the First World War, German-Japanese relations improved at the instigation of the Japanese army leadership after changing developments from the 1930s and initially led to the Anti-Comintern Pact in 1936,²³ which fascist Italy and other European states also joined and whose aim was to combat the spread of communism from the Soviet Union. One year after the start of the Second World War, Hitler's Germany concluded the Tripartite Pact with Italy and Japan in 1940, thus shifting part of the world war to South-East Asia and supporting Japan in its imperial endeavours, which had driven the German Empire into a war with China in 1937 - its second since the end of the 19th century.

The imperial Japanese government ignored the Geneva resolutions banning chemical weapons and had the production of mustard gas ramped up on the remote island of Okunshima²⁴ in the greatest secrecy, which - filled into bombs and grenades - was used by the tonne, especially in northern China, killing tens of thousands of civilians. The Japanese army was feared for its cruelty. According to credible testimonies, enemy soldiers were hanged by their tongues, babies were nailed to walls, women's breasts were cut off and prisoners were skinned alive. ²⁵ The atrocities committed by the Japanese, which also included experiments with biological weapons on prisoners of war, poisoned Japanese-Chinese relations for many years after the war and perpetuate mutual mistrust to the present day.

The full extent of the chemical war did not come to light until 2014, when the Chinese asked Japan to collect and destroy their toxic legacy, which rusted in the ground and released poison gas. The Chinese government provided Japan with the following assessment as early as 1992: an estimated 200,000 bombs and shells were said to have been buried during the Japanese retreat in 1945, which now pose a high risk to the population. China again called on Japan to remove this dangerous legacy and cited new figures: a total of two million tonnes of chemical weapons had been found at 40 locations in 17 provinces. The largest pit alone contained more than 33,000 bombs and grenades.

²³ Anti-Comintern Pact - Wikipedia, accessed 5 September 2024

^{24 &}quot;Die Insel der Versuchskaninchen", author Florian Seidel, in DER SPIEGEL Online v. 10.9.2012, accessed. 5.9.2024

^{25 &}quot; Der unfassbare Exzess zwischen Japan und China ", author Berthold Seewald, in WELT online v. 4.11.2013. accessed. 5.9.2024

²⁶ Consulate General of the People's Republic of China in Frankfurt, press release from 1 December 2014

Part 6: Mass produced, but not used: Gaddafi's poison gas in Libya

At the end of the 1980s, research by the German public broadcaster ARD's Panorama program revealed that the German company Imhausen in Lahr am Rhein, together with the federally owned Salzgitter Group, had supplied Libyan dictator Muammar Gaddafi with three production plants for large quantities of mustard gas (LOST) and precursors for the even deadlier poisons Sarin and Soman, disguised as a "pharmaceutical project". According to Panorama, the Libyans had already started producing LOST when the Federal Criminal Police searched the Imhausen company and confiscated thousands of documents relating to the construction and operation of the facilities in Rabta, Libya. Although Imhausen boss Jürgen Hippenstiel was sentenced to five years in prison in 1990, he was allowed to keep the millions in profits from the dirty business. The German government had already warned the German embassy in Moscow in the mid-1980s based on reports from a Salzgitter employee. However, it ignored the reports, probably out of consideration for the then still state-owned Salzgitter Group, which was privatised on 1 October 1989 and sold to Preussag AG.

Probably because Gaddafi wanted to rid himself of the reputation of an Arab pariah and the ostracism of Libya by the Western world, he joined the United Nations Chemical Weapons Convention in 2004, declared that the stockpile of finished chemical weapons would be destroyed and invited the United Nations Organisation for the Prohibition of Chemical Weapons (OPCW) to monitor the destruction process. He declared almost 25 tonnes of mustard gas, 3563 bombs filled with chemical warfare agents and 1390 tonnes of chemical precursors for sarin to the OPCW, which he promised to eliminate. To this end, the production facilities were to be converted into destruction plants. However, the elimination programme remained incomplete.²⁹

From February 2011, a state of emergency prevailed in Libya. Rebel groups throughout the country attempted to bring about the fall of Gaddafi. International observers of the events feared that the unpredictable ruler could use the chemical weapons against his own people. In March, the USA and other NATO countries began air strikes on Libya with the aim of enforcing a no-fly zone to prevent attacks by Gaddafi troops from the air. From June 2011, Gaddafi was wanted worldwide as a suspected war criminal with an international arrest warrant, captured in Libya on 20 October 2011 and brutally killed by rebels.

What Gaddafi left behind for his country, which fell apart into two warring factions after his death, were - as of 2014 - still 517 artillery shells, eight 250-kilogram bombs and 45 rocket

²⁷ 27 ARD Panorama from 12 December 1989, available at https://www.ndr.de/fernsehen/sendungen/panorama

²⁸ Die Tageszeitung (taz) online v. 15.12.1989, retrieved on 9.9.2024

²⁹ Tagesspiegel online v. 2.3.201, retrieved on 9.9.20241

launchers - all filled with mustard gas and already leaking in parts. ³⁰ The USA and Germany agreed to remove the remnants of Gaddafi's toxic legacy, including the sarin precursors - at taxpayers' expense, mind you, not at Imhausen's or Salzgitter's expense.

30 Deutsche Welle Online from 6 February 2014, retrieved on 9 September 2024

Part 7: Mass murder of Kurds in Iraq in 1988 using toxic weapons

The war between Iran and Iraq began in 1980. It lasted until 1988, making it the longest conflict in the conflict-ridden Gulf region since the end of the Second World War. It was instigated by the Iraqi dictator Saddam Hussein, who was competing with his neighbour Iran - an Islamic theocracy since 1979 - for supremacy in the Persian Gulf and for natural resources such as oil. The war cost the lives of up to 875,000 people on both sides - not counting side conflicts such as Saddam's invasion of oil-rich Kuwait and Kurdish areas in northern Iraq.

The rebellious Kurds in particular, who live widely scattered in their settlement areas in the Middle East in Türkyie, Syria, Iran and Iraq and have been fighting for their own state for many decades, earning them the bitter enmity of the governments of these countries, attracted the hatred of the Iraqi dictator. He particularly resented the fact that some of them were fighting against Iraq in joint brigades with Iran. His revenge was terrible.

Once again, it was mainly German companies that made headlines in connection with the supply of components for chemical weapons production to Iraq, such as Karl Kolb KG and its sister company Pilot Plant from Dreieich in Hesse or the Hamburg-based company W.E.T. (Water Engineering Trading). ³¹ According to the findings of the United Nations Monitoring, Verification and Inspection Commission (UNMOVIC), no less than 3859 tonnes of chemical warfare agents were produced between 1983 and 1991, of which 3315 tonnes were filled into aerial bombs, missile warheads and artillery shells. This resulted in 101,000 explosive devices filled with chemical warfare agents, some of which were used in the war against Iran and others in the Iraqi Kurdish regions.³²

In addition to the equipment and chemical precursors for Saddam's poison gas production, the dictator also received many other weapons systems from the USA, Germany, Great Britain and other NATO countries, as well as from the Soviet Union, which still existed at the time.³³ They all feared the strengthening of the Islamist theocracy under Ayatollah Khomeini and Iran's potential access to Iraqi and Kuwaiti oil reserves. That is why for years they supported Saddam in all his belligerent actions in the region or looked the other way.

This was also the case with the chemical attack by the Iraqi air force on the mainly Kurdish-inhabited city of Halabja (another spelling Halabja) on the border between northern Iraq and Iran, which took place on 16 March 1988 and caused worldwide horror. Saddam Hussein's cousin Ali Majid had already launched Operation Anfal against the Iraqi Kurds in 1986, which is said to have claimed the lives of up to 180,000 people over the years. In

^{31 &}quot;Smell of rubbish and sweet apples", author Christoph Gunkel, in DER SPIEGEL v. 15.3.2013, accessed. 10.9.2024

³² UNMOVIC: Twenty-fifth quarterly report on the activities oft the United Nations Monitoring, Verification and

Inspection Commission, May 2006, retrieved on 10.9.2024

³³ Hans Leyendecker: The poison gas deliveries to Iraq were no coincidence, Friedrich Ebert Foundation March 1991

Halabja, up to 5,000 civilians, including many women and children, suffocated to death in just one day from a poison gas mixture of Lost, Sarin and Tabun. Some of those who survived suffered for years from the long-term effects - burnt lungs, blindness and, above all, cancer. 10 years after the attack, the number of children with Down's syndrome had doubled and the leukaemia rate had tripled. Miscarriages occurred ten times more frequently than in neighbouring areas that were not affected by poison gas. ³⁴

More than 30 years after Halabscha, three German companies were sued for aiding and abetting genocide and crimes against humanity, Südwestrundfunk reported in 2022. 3536 Due to the coronavirus pandemic, the proceedings in Halabdja were suspended for over a year and a half. It was resumed in spring 2022. No results are yet known.

In April 1992, a trial began at Darmstadt District Court against ten German managers whose companies were involved in the construction of the Iraqi facilities for poison gas production. A total of three were sentenced - to less than three years' imprisonment on probation. According to the court, the so-called "dual-use problem" had a mitigating effect. The factory set up with German assistance was also suitable for the production of pesticides, so that it could not be proven that the intention to produce toxic gases here was clear to everyone involved. Three of the defendants were acquitted and the other cases were dropped due to the statute of limitations.³⁷

Three European states have recognised Saddam's criminal attack on Kurds as part of the Anfal campaign as genocide: the parliaments of Sweden, Norway and Great Britain. However, a corresponding motion by the Left Party parliamentary group in the German Bundestag failed to gain a majority. An application for compensation was also rejected by the Federal Foreign Office. The incidents in Halabja "are the sole responsibility of the Iraqi government", according to the German government's response to the parliamentary group's minor interpellation.³⁸

³⁴ Iraqi Kurdistan: Human Rights Report of the Society for Threatened Peoples No. 83: 30 years of Halabja, March 2018

³⁵ SWR 2 Knowledge: Poison gas attack against Kurds - Genocide with German complicity in Halabja? Programme v.

^{36.8.2022,} retrieved. 10.9.2024

³⁷ See 32

³⁸ Deutscher Bundestag 17th electoral term, Drucksache 17/12692 of 13 March 2013

Part 8: Poison gas in the Syrian civil war

The "civil war" in Syria was a conflict that has been ongoing since March 2011 between the Assad government and various armed opposition groups and which, as it progresses, increasingly involves the participation of third countries pursuing their own interests. ³⁹

The war is being fought between government and opposition forces with great bitterness and with the acceptance of war crimes, including the use of poison gas. According to political observers, it is less a civil war than a proxy war between the USA and Russia on the one hand, with allies such as Saudi Arabia, Türkyie and Iran also playing a strong role, and between Islamist and ethnic groups on the other.

According to the Syrian Observatory for Human Rights (SOHR), 613,000 people had already been killed in these armed conflicts by March 2023 - including over 162,000 civilians - and 2.1 million injured.⁴⁰ The number of displaced persons and refugees is in the millions.

Reports of the use of poison gas repeatedly emerged during these clashes - such as mustard gas in the small Syrian town of Umm Hawsh in 2013 and sarin in the city of Han Shaykhun in April 2017. However, the evidence for the direct responsibility of the Syrian dictator Assad remained sketchy. Until recently, the German Foreign Office considered the United Nations' account that Assad's troops and the Islamic State (IS) had used chemical weapons, including mustard gas and sarin, on both sides since 2012 to be credible.41 France's deputy UN ambassador Alexis Lamek had also expressed this view to the UN plenary, claiming that there was evidence of this in three cases.⁴² Doubts remained and intensified when an alleged Islamic State chemical weapons expert captured by US troops appeared in March 2016 and claimed that he had been present during IS experiments with mustard gas. 43 Assad's ally Russia had always denied Syria's use of poison gas and vetoed condemnations of Syria by the United Nations. However, the Russian FSB does not appear to many to be a credible authority. In any case, the subject of "poison gas in modern wars" requires extreme caution. Too many of the accusations and mutual recriminations levelled there are based on alleged intelligence findings. The many hundreds of victims of the poison gas attacks in Syria - if they are still alive - are still waiting for justice, as the Germany Director of Human Rights Watch, Wenzel Michalski, stated in 2014.44 This is unlikely to have changed ten years later, as the war in Syria continues with full vigour

For its part, Syria declared the complete destruction of its stockpiles of poison gas in 2014, in which German experts also participated. Germany is also a founding member of the International Partnership against Impunity for the Use of Chemical Weapons, which

³⁹ Wikipedia: Civil war in Syria since 2011, retrieved on 12.9.2024

⁴⁰ SOHR press release of 15 March 2023, quoted in Wikipedia op. cit.

⁴¹ Press release of the Federal Foreign Office of 24 May 2022, retrieved on 3 October 2024

^{42 &}quot;UN confirms use of chemical weapons in Syria" Deutsche Welle Online 25.8.2016, as of 4.10.2024

⁴³ "C-weapons expert from IS testifies", Deutsche Welle Online of 9 March 2016, accessed on 5 October 2024

⁴⁴ Human Rights Watch 25 August 2014, retrieved on 1 October 2024

was founded in Paris on 18 January 2018 and which almost 40 countries worldwide and the entire EU have joined, as the Federal Foreign Office stated in 2022. 45 Word of the new alliance against chemical weapons does not seem to have reached the warring parties in Syria - or they don't care. A report by Swiss Radio and Television (SRF) states that around 50 more chemical weapons attacks had taken place in Syria by spring 2018, including on the city of Duma. 46 And these are only officially reported cases.

The ousting of the Assad regime in December 2024 also marked the end of its reign of terror with torture, murder and war against its own people. From today's perspective, it seems unlikely that Assad will return to Damascus from his asylum in Moscow. However, the United Nations should critically examine whether there are still residual stocks of chemical weapons or their components in Assad's former arsenals. Because the domestic political situation in Syria is likely to remain unstable for some time to come, and the rival Islamist groups in the country could be tempted to either continue using chemical weapons - if available - or to threaten to use them.

-

⁴⁵ Federal Foreign Office, op. cit. accessed on 3 October 2024

⁴⁶ "Several dozen times poison gas was used in Syria", SRF (Swiss Radio and Television), quoted from Wikipedia: Civil war in Syria since 2011, itemisation no. 339, as of 6 Oct. 2024

Part 9: Beyond the war effort: Poison attacks on political opponents in Russia, Jordan, Palestine, Malaysia and Iran

Opposition activists live dangerously in Russia - as shown by examples such as Boris Nemtsov, who was virtually executed with four shots in the back on a bridge in Moscow in 2015. Anna Politovskaya died in a similar way - shot at the door of her flat in Moscow in 2006. Other opponents of Putin, such as Sergei Navalny, Sergei Viktorovich Skripal and, most recently, Vladimir Kara-Mursa, were the targets of poison gas attacks. They only just survived. Not so the former KGB agent Alexander Litvinenko, who was contaminated with the radiation poison polonium and died in agony in a London clinic in 2006 after weeks of infirmity.⁴⁷ These examples show that chemical weapons can also be used as a weapon of mass destruction.

Beyond war operations, the use of terrorism has become an option, preferably by the secret services of authoritarian states and in complete disregard of international agreements. Some of the attacks remain undetected or do not attract the attention of the world press. These include the alleged attack by the Israeli secret service Mossad on the then Jordanian Hamas leader Chalid Mischal in Jordan in 1997. Mossad agents sprayed a substance similar to the opioid fentanyl in high doses into his ear while he was walking in Amman. The drug can cause paralysis and, in high doses, can lead to death. Mashal survived, however, because Jordan's King Hussein threatened to have three captured Mossad agents publicly executed if Israel refused to deliver an antidote quickly. Israel delivered, the Mossad was embarrassed when Mishal told the world press about it. ⁴⁸ This was not the case with another attack on a Palestinian terrorist a few years earlier, on Wadi Haddad, who had prepared the hijacking of the Lufthansa plane "Landshut" to Mogadishu in the summer of 1977. Haddad was known as a friend of Belgian chocolates. The Mossad allegedly managed to smuggle a Palestinian confidant into Haddad's neighbourhood, who handed him the poisoned chocolates. Haddad ate them - and died.⁵⁰

Another assassination attempt using a chemical warfare agent, which took place in Malaysia in 2017, caused a worldwide sensation. The victim: the disgraced half-brother Kim Jong-nam of North Korean dictator Kim Jong-un. At the airport in Kuala Lumpur, he was sprayed with the nerve agent VX by two women in the midst of other travellers. He died on the way to the Hospital.⁵¹

And finally, in 2023 - at the height of the mass demonstrations by women against the mullah regime and the religious police in Iran - there were mysterious poisonings at girls' schools in Isfahan and other cities. Schoolgirls rolled on the floor gasping for air, others

 $^{^{47}}$ "Russian opposition - victims of a murderous system" WELT online (no date given), accessed on 7 October 2024

^{48 &}quot;Die spektakulärsten Giftanschläge" Tagesanzeiger Zurich 25 February 2017, retrieved on. 7.10.2024 ⁵⁰ "Tödliche Schokolade", author Egmont E. Koch, ARD/WDR 28.6.2010 ⁵¹ Tagesanzeiger Zürich ibid.

complained of nausea and dizziness - these images also travelled around the world. ⁴⁹ For opposition Iranians abroad, it was clear that these were acts of terrorism by the regime with the aim of breaking the resistance of women and girls. However, it remained unclear which toxic substances were used. The Iranian government stated that it had found no evidence of a suspected wave of poisonings. "No poisoning was found during the investigations on site and in the laboratories," it said in a report by the Ministry of Intelligence, which was quoted in state media. Only traces of pepper spray or stink bombs were found. There were also no deaths or long-term physical damage. ⁵⁰ There is no need to - one might add - the purpose of this action was achieved in this way. Since then, the streets and squares, schools and universities in Iran have remained largely calm.

To summarise the topic of "poison gas as a weapon": Chemical warfare agents in armed conflicts have undergone a change in significance over the last hundred years - from weapons of mass destruction in world and colonial wars, causing thousands of deaths, to instruments of terror against insurgents and opponents of regimes. International agreements to ban chemical weapons may have increased the inhibition threshold for the use of these weapons - but their complete abolition has not yet been achieved.

_

^{49 &}quot;Poisonous revenge of the god-fearing" in. Daily newspaper (taz) online v. 11.3.2023, accessed on 7.10.2024

^{50 &}quot;Controversial report on poisoning published" in: Tagesschau from 29 April 2023, 2.39 p.m. retrieved on 8 October 2024