

# Abandoned Chemical Weapons in Sino-Japanese relations: From denial to cooperation

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**Abstract:** *As a consequence of World War II, there are many chemical weapons left by the Japanese army in China, causing many casualties and environmental problems. Since 1990, the issue of abandoned chemical weapons is open on a diplomatic level, representing an important part of bilateral relations between the two countries. This contribution maps out two decades of China-Japanese cooperation in this issue, providing basic information about political, legal or practical problems in cooperation between the main involved actors and discovering important turning points in bilateral relations regarding this issue. Abandoned chemical weapons in China are considered to be a big burden of the past in relations between China and Japan, causing political incidents and thus representing real obstacle for improvement in relations between China and Japan. Despite the fact that cooperation between the two countries has been sometimes complicated, it can be expected that the abandoned chemical weapons in China will be destroyed in this decade. The aim of this contribution is to provide a comprehensive introduction to the historically unique project of abandoned chemical weapons clean up and all issues in development related to their destruction.*

**Keywords:** *China, Japan, Abandoned chemical weapons*

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# 1 Introduction

Chemical Weapons (CW) had been produced and extensively used by imperial Japan during its expansion campaign during World War II and then left on Chinese territory at the end of war. After growing openness of China in the 1980s, a painful chapter of abandoned chemical weapons (ACWs) of the Japanese army was opened on a diplomatic level. During the 1990s, big progress has been achieved on this issue and the first legal and technological aspects of possible cooperation were solved. Despite the fact that Sino-Japanese cooperation on ACWs destruction continued, many problems occurred since 1990s. This article provides a basic introduction to the ACWs on Chinese territory and its impact on China-Japan relations. It is not an objective of this article to provide comprehensive introduction to technological aspects of ACWs demilitarization. The main attention is paid to the development of political cooperation in this field, partly legal issues and problems connected with project implementation.

This article is divided into four parts, based on chronology marking core events in Sino-Japan relations regarding ACWs. The first part deals mainly with the origin of ACWs and China's policy in the field of prohibition of chemical weapons, starting in 1945 until the late 1980s. The second part is marked by the years 1990 to 2000 and presents the main points in bilateral cooperation between China and Japan, focusing mainly on bilateral and multilateral negotiations and preparation activities. A more practical point of view is presented in the third part, which deals with the period between 2000 and 2010 where most of the excavation and recovery activities dealing with ACWs were conducted. In this chapter the main practical and political problems are discussed. Despite the fact that the period starting in 2010 in Sino-Japan relations regarding ACWs is almost unwritten; there are some prospects of future cooperation. Because it is a rare and unique topic, mainly public governmental sources and newspaper articles are used.

This topic is almost untouched in Central European academic milieu. However on a global level, several works related to abandoned chemical weapons are well known. A great source of inspiration for this article is the report *Social and environmental aspects of abandoned chemical weapons in China* published in The Nonproliferation Review in summer 1997 by Hongmei Deng and Peter O'Meara Evans. The presented contribution is an excellent introduction to the topic of ACWs, however as it was written 15 years ago it does not present development on this issue over the last decade and a half. Some of the mainly practical issues are developed by Peter O'Meara Evans in the BICC Paper (1997) dedicated to *Destruction of Abandoned Chemical Weapons in China*. Margaret E. Kosal (2006) highlighted the role of public involvement in the issue of chemical weapons destruction in her contribution in book edited by Ramesh Thakur and Ere Hauru *The Chemical Weapons Convention:*

*Implementation, Challenges and Opportunities*, which could serve as a broader introduction to the issues of Chemical Weapons in general.

The aim of this case study is not to build a theory regarding cooperation between two states, nor to understand an abstract construct. In this sense, the presented article is similar to an intrinsic case study. The article is not dedicated to the validation of a hypothesis, but to offer an explanation and deeper understanding of a very specific case (Stake: 1995). In this case, it is about the ACWs in Sino-Japanese relations. In another point of view, this case study can be characterized as descriptive, describing phenomenon in real life context (Yin 2003). According to the categorization created by Arend Lijphart (1971), this case study could be labeled as “atheoretical;” there is no attempt at generalization, theory development or theory testing (Lijphart 1971: 691). However, despite the fact that no theory is applied or hypothesis tested, there are two main research questions through the article: *How the issue of ACWs developed between Japan and China?* And *what are main factors influencing cooperation?* The following article offers an integrated description of this issue in chronological order, emphasizing political, legal and practical developments.

## 2 Origin of the ACWs problem: 1945–1990

According to the declaration of the People’s Republic of China presented to the Organization for the Prohibition of Chemical Weapons (OPCW) Second Review Conference, which took place in Den Haag in April 2008, there are over 60 locations in 16 provinces, where ABWs were discovered. The worst situation is in Haerbaling, Jilin Province, with around 330 thousand pieces of ACWs, as estimated (PRC 2008).

It is necessary to note, that estimates of numbers may vary. For example according to the Federation of American Scientists, it is estimated that there are 700 thousand pieces of ACWs in China, which is also the number estimated by Japan. However, the real number could be around two million, as noted by China (FAS 2000). By now the number of victims, mainly children playing and construction workers is estimated to be more than two thousand (OSC 2006). The first question is how did the problem emerge?

The origin of the problem is rooted in the Sino-Japanese conflict, which took place between 1937 and 1945. From the early beginning during initial advances of expansionist Japan, The Imperial Army had little or no need to introduce chemical warfare. The situation changed, with the first Japanese obstacles in advancing. The evidence of the use of chemical weapons by Japan against the Chinese was first presented to the League of Nations in October 1937 with little attention (McCamley 2006: 48). At the same time, the Japanese chemical weapons service conducted re-

search in occupied Shanghai, in order to discover Chinese civil defense preparations or military protection. They found little or no evidence. (McCamley 2006: 50) Thus, chemical warfare was considered as effective, thanks to the element of surprise and weak preparation on the Chinese side. There are no accurate sources which provide evidence regarding how many chemical attacks had occurred during Imperial Japan expansion campaign. Some sources report that there were only 876 chemical attacks in the period between July 1937 and mid November 1941 and till end of war, there were more than two thousands occasions on which toxic gas has been used (Tadashi, not dated, Edward et al. 2006: 38). As U.S. prosecutor Thomas H. Morrow investigated, there were around 37 thousands casualties as of consequence of chemical warfare, 2086 were fatal (Tanaka 1988: 16). However, also here sources about fatalities vary. According to one explanation, many victims died several months after the end of the war, or in the chaos, there was no possibility to count all the victims. Real number of fatalities is much more likely around tens of thousands (Don Tow's Website 2009). Of course, the use of chemical warfare was in strong violation of the Geneva Protocol of 1925 prohibiting the use of chemical weapons as well as the Versailles peace treaty.

It is important to note, that also Allied Forces considered the possibility of the use of chemical weapons in retaliation. The primary reason that chemical and biological weapons were not used was the strong opposition by the British. Winston Churchill feared that the use of gas against Japan would encourage German gas attacks against Britain. In 1944, the United States agreed to follow the British strategy not to initiate the use of gas or retaliate unilaterally (Pape 1993: 163). In the end of the war, it was estimated, that 25 % of the Japan artillery munitions and 30 % of all aircraft munitions were chemical (McCamley 2006: 50). By considerably quick progress of allied forces against Japan, and the Japanese need to withdraw; huge amounts of chemical munitions were left behind Japanese territory on China's soil, in many cases vulnerable to natural forces or dumped into the rivers. Because of the chaos at the end of war, there is lack of documentation about such activities if there was any (Oriental Outlook Magazine 2003).

When rest of the world celebrated the end of World War II, in China, there was still instability caused by tensions between main political forces. The struggle for power between the Nationalists and the Communists soon resulted in a civil war. As a consequence of the Nationalist defeat, the People's Republic of China (PRC) was established under Communist rule. Under Mao Zedong, the PRC had to solve many internal problems and the bipolar world contributed to the PRC's political isolation. The PRC turned to deeper isolation after the Sino-Soviet split in 1959, when Nikita Khrushchev decided to withdraw Soviet technical and aid experts (Lüthi 2008). The PRC went out from political isolation in the late 1970s as a result of introduced reforms. Despite the PRC membership in United Nations bodies since 1971, it took

another almost ten years till the PRC went active about the chemical weapons issues on international level. Since 1950s, there were many accidents reported by people who discovered ACWs and were injured, or by families of those who were killed. Hongmei Deng and Peter O'Meara Evans provide in their article a few examples of such accidents (Deng and Evans 1997: 102). Simultaneously with accidents, there were efforts for preliminary destruction in China. From 1959 to 1963, more than 200,000 munitions were moved to Meihokou city, Jilin province, where they await destruction or two burial pits were constructed near the Dunhua City (Deng and Evans 1997: 102).

In the early 1980s, there was a discussion about the new Chemical Weapons Convention on an international level into which China contributed with its proposals and ideas about the nature and scope of this new instrument. In the first years of negotiations, the main focus was on defining chemical weapons and toxic substances, verification measures and the scope of the Convention. On the international level, the problem of ACWs in China was first mentioned by the Chinese delegation on the Conference on Disarmament in Genève in 1987. It took more than 40 years for the problems of the ACWs to be solved on an international level. It seems that PRCs growing political openness and the urgency of the problem, when more victims of ACWs were reported, contributed to large extent to open this painful issue on an international level.

### **3 Initial cooperation: 1990–1999**

In 1990, the Chinese Government made its first informal request to Japan concerning abandoned chemical weapons on the Chinese territory and the Ad Hoc Committee on Chemical Weapons was created (ACWO 2011a). In January 1991, the first bilateral inter-governmental talks started. One year later, in February 1992, China presented some information on the Conference on Disarmament about ACWs. During this period of first contact, there is a characteristic very prudent attitude from China. For example, it is interesting that in official documents Japan is not mentioned, but referred to as the “foreign state.” Based on the information from February 1992, the first estimates had been made and the first problematic issues were presented: ACWs are responsible for more than two thousand victims and ACW are endangering another two thousand students at Gaocheng High School, because they are found in the campus (PRC 1992). China has also noted that from 1973 to 1988 more than 300 thousand chemical shells had been destroyed as well as more than 20 tons of toxic agents around seven cities. In another seven cities, chemical ammunition was waiting for destruction and some other places were suspected of buried ACWs (PRC 1992). Conference on Disarmament in 1992 can be considered

as a turning point in relations between the two countries, because both countries agreed that abandoned chemical weapons will be incorporated to the new Chemical Weapons Convention (CWC), which was signed in 1993 (CD 1992a). This progress could be considered as a victory for Chinese diplomacy, which successfully reached incorporation of its proposals in to the CWC during the Conference on disarmament negotiations about articles related to ACWs (CD 1992b).

Under Article II 6 of the CWC, Abandoned Chemical Weapons are defined as “*Chemical weapons, including old chemical weapons, abandoned by a State after 1 January 1925 on the territory of another State without the consent of the latter*” (CWC: Article II). After definition, also obligations and responsibilities are defined. According to Article I 3 “*Each State Party undertakes to destroy all chemical weapons it abandoned on the territory of another State Party, in accordance with the provisions of this Convention*” (CWC: Article XIII). Furthermore, under this article, there are legally binding obligations for Japan.

These obligations are extended by the Verification Annex Part IV, which mentions that the Abandoning State Party shall provide all necessary financial, technical, expert, facility as well as other resources and that the Territorial State Party shall provide appropriate cooperation (CWC: Verification Annex, Part IV). It is also stated, that Each State Party shall submit to the Organization, not later than 30 days after this Convention enters into force for it, the declarations, in which (among others) it shall declare whether it has abandoned chemical weapons on the territory of other States and provide all available information (CWC Article III). Verification Annex provides concrete rules related to destruction of ACWs. In Part IV (A) 12 of Verification Annex, the destruction of chemical weapons is defined as “*a process by which chemicals are converted in an essentially irreversible way to a form unsuitable for production of chemical weapons, and which in an irreversible manner renders munitions and other devices unusable as such*” (CWC: Verification Annex, Part IV). It is up to each State Party to determine how it shall destroy chemical weapons. However, dumping in any body of water, land burial or open pit burning is prohibited and chemical weapons should be destroyed only at specifically designated and appropriately equipped facilities (CWC: Verification Annex, Part IV).

It had been also incorporated to CWC, that “*Each State Party, during transportation, sampling, storage and destruction of chemical weapons, shall assign the highest priority to ensuring the safety of people and to protecting the environment. Each State Party shall transport, sample, store and destroy chemical weapons in accordance with its national standards for safety and emissions.*” (CWC: Article IV). Article IV (6) sets up the deadline, in which the State Party should destroy all its chemical weapons no later than two years after this Convention enters into force for it and shall finish not later than 10 years after entry into force of this Convention CWC: Article IV), therefore no later than 2007.

Despite the fact that Japanese CW abandoned on Chinese territory are primarily referred to as “ACWs” they could be classified as well as “Old Chemical Weapons.” According to Article II 5 “Old chemical weapons” means “*Chemical weapons which were produced before 1925; or Chemical weapons produced in the period between 1925 and 1946 that have deteriorated to such extent, that they can no longer be used as chemical weapons.*” (CWC: Article II). The technical definition of the “extent, that they can no longer be used as chemical weapons” was a very hard point to negotiate between China and Japan in 2000, when finally the document called “Guidelines for determining the usability of chemical weapons declared as old chemical weapons” was presented (OPCW 2000).

Because of legal obligations under the CWC in February 1995 by Japan, there were conducted the first monitoring mission including 15 officials of the Foreign Ministry, the Prime Minister’s Office, the Japanese Embassy in China, the Defense Agency, and related persons of private companies. Several practical questions had to be solved. Among others, how the process of destruction will be conducted? Should the ACW be excavated, recovered and transported to Russia, which already had experience with chemical weapons destruction or should there be built new destruction facilities in China? Regarding this issue, it was expected, that US and German companies might be consulted, because of their experience with chemical weapons destruction process. In April 1996, Russian and Japan defense officials agreed to hold future talks about chemical weapons destruction and the Russian Defense Ministry requested the Russian Foreign Ministry to offer help to Japan with destruction (Evans 1997: 27). Despite the offer, the risk posed by possible transport was considered too high and this solution was abandoned. Destruction directly in China from then on was considered as the only solution.

In April 1997, a Joint Working Group between the two countries was created, where implementation of the CWC was discussed (Koumura 1997). This Joint Working Group was a forum, where basic ideas and plans for destruction were solved. Thanks to the Joint Working Group, The Japanese basic study about abandoned chemical weapons was completed and later the Cabinet set up a special office to deal with the issue (MFA 1997). In May 1998, a Technology Study Group for the Destruction of Abandoned Chemical Weapons, in order to study technologies suitable for the destruction and consider proposals received from domestic and foreign companies interested in ACWs destruction, was formed. A year later, it presented The Study report on the destruction of ACWs. The technological side of the ACWs problem was solved in 2003 (TSG 2011), when a basic understanding was reached on destruction technologies (Nishi 2007).

It has to be noted, that technology of further destruction was one of the major problem points. As mentioned earlier, there are over 60 locations in 16 provinces, where there might be around two million of ACWs. From an operational point of

view, the destruction of CWCs could be divided into two phases. The first phase mainly deals with excavation and recovery, containing procedures from excavation to recovery (cleaning, inspection, identification, marking and packing, and ending with temporary storage). The second phase is mainly about destruction. First, the ammunition is dismantled, then during the treatment the poisonous content is destroyed and at last, the waste is ecologically processed (Nishi 2007). Practical problems occur during both phases.

The quantity was the first huge problem. Thanks to the fact that munitions had been left more than fifty years ago in open landscapes, some ACWs are buried in the soil or dumped in the mud of rivers and thus were heavily corroded, damaged or both. Moreover, many shells contain picric acid, which may have formed highly explosive picrate over the years (Delegation of Japan 2008). There were many types of munitions filled with various agents, which are hard to recognize, because the labeling on the munitions' body has corroded. Moreover, the chemical ammunition is mixed with conventional ammunition (Nishi 2007). The work during the excavation process is similar to the work of archeologists, who deal with each piece very carefully, trying to uncover some labels from the corroded ammunition body, softly progressing piece by piece.

Because there are various types of ACWs filled with different agents, a single technology for destruction cannot be used (Coman-Enescu 2001). Also environmental standards were solved. It was decided, that if the Chinese law does not provide for any emission standards regarding substances related to the destruction of ACWs, Japanese, American or European standards will be applied on emissions release (Coman-Enescu 2001). The destruction of chemical weapons has been a significant problem since World War I, where chemical weapons were used for the first time on a large scale. However, the methods used for their destruction up to the end of 1960s are now considered as environmentally unsound (Stock, not dated). They were for example buried in old mine shafts, dumped at sea or exploded in open space. However, Chinese law is developing, changing quickly, which is another factor of slowing down the process of ACWs destruction (Delegation of Japan 2008).

As a result of mutual understanding on the issue of ACWs destruction and its aspects by Japan and progressing agreement on specific issues solved in the Joint Working Group a Memorandum of Understanding has been signed on July 30 1999 in Beijing (MFA 2011a). The Memorandum of Understanding between Japan and China on the Destruction of Abandoned Chemical Weapons was another milestone in Sino-Japan relationship regarding chemical weapons, representing six years of diplomatic efforts. The eight point memorandum recognizes the huge amount of ACWs and the obligation under CWC for Japan to destroy them. Japan also had an obligation to provide all necessary financial, technical, expert, facility as well as other resources for the purpose of destroying the ACWs. Environmental and workers



health safety conditions are mentioned as well. Also basic rules in the case of accident or technology selection for destruction process were laid down (MFA 2011a). The amount of necessary investments required to fulfill the obligations for Japan were estimated at 1.67 billion US dollars (The CBW Conventions Bulletin 1999).

With progressing bilateral talks and entry of the CWC into force, several operational changes were done. First, the issue of ACWs was first in charge of the Prime Minister's Office of Japan, where the Office for Abandoned Chemical Weapons had been established in April 1999. This change was practical; in order to foster cooperation with related ministers and government agencies to deal with technology and destruction plan. Additional resources of 809 million Yen were approved for the budget in the fiscal year 1999 and another 2.82 million Yen for the year 2000 (MFA 2011b). Second, China-Japan Experts Meetings were established in June 1999 and since then experts met approximately once every month (ACWO 2011b). Third, some organizational changes took place also on the Chinese side, where the Office for the Destruction of Japanese Chemical Weapons has been established as a part of Asian Affairs Bureau of the Chinese Foreign Ministry in order to organize arrangements necessary for cooperation (ACWO 2011b). Thus, the year 1999 seems to be very important for enhancing practical cooperation. From then on, several teams of experts were sent to different locations in order to proceed with excavation and recovery.

#### **4 Excavation and preparation: 2000–2010**

On 18<sup>th</sup> April 2000, the Japanese government discussed the 1967 export law about weapons to send some necessary equipment to China in order to make progress in implementation of ACWs in China. The 1967 export law prohibits the export of weapons to Communist countries, export of weapons to nations taking part in international armed conflict or the export of weapons to countries targeted by UN Security Council resolutions prohibiting the export of weapons (Daily Yomiuri 2010). Because protective suits, masks and containment vessels were considered as weapons, a Cabinet decision was needed. The Cabinet evaluated this situation as an exception, because protective equipment will be returned back to Japan after the use and thus will not be transferred to a third party (MFA 2000). During the period between 2000 and 2008, 18 excavation missions took place in different provinces. The first excavation and recovery mission started in September 2000 in Bei'an City, Heilongjiang province. Because chemical munitions were discovered nearby residential areas, the evacuation of local people was a considerable challenge. However, there were several more obstacles. For example, in the end, the total number of chemical munitions was twice higher than estimated. Excavation operations took place behind

protective walls made and then shipped from Japan, which required some additional logistical tasks (ACWO 2011c). Logistic problems and problems related to technical side of excavation and recovery were not the only ones.

In 2003, an accident occurred, when workers at construction site in Qiqihar unearthed five metallic barrels and one of them ruptured. Workers unaware of the content cut the barrels into pieces and sold them to recycling facility. A few hours later, workers reported first health symptoms (China Daily 2003). ACWs left in Qiqihar have killed one and seriously injured 43 local citizens and to a large extent affected their normal lives (Dreyer 2006: 540). This accident resulted in a huge wave of antipathy in the summer of 2003, when more than one million Chinese people signed an online petition calling up to Japan to apologize for that accident (He 2007: 2). Following the accident Vice Foreign Minister Wang Yi called the Japanese Ambassador to China, and lodged solemn representations on the leaking of chemical weapons left by Japan in Qiqihar, Heilongjiang Province. In a diplomatic language, the Vice Foreign Minister stated, that: "*China urges the Japanese government to take immediate action, shoulder its responsibility and deal with problems arising from the issue.*" (MFA 2003). In the statement, the ACWs were called a "cancer" that has injured and threatened the security of the Chinese people (MFA 2003). This step was more or less logical. Affected people created a push on the government, which could harm the government performance. On one hand, the Chinese Government understands the difficulty and complexity of the issue. On the other hand, the call of the people forced it to take appropriate diplomatic steps to soften the anger of the injured and affected people by chemical weapons. The Japanese government sent a fact finding mission to Qiqihar to seal the weapons and provide medical help to the victims. Three intergovernmental talks followed this Qiqihar accident, after which Japan agreed to pay 300 million Yen (2.8 million USD) for the costs related to the accident (MFA 2004). In October 2003, the Chinese Prime Minister Wen Jiabao talked to the Japanese Prime Minister Junichiro Koizumi, presented the right of recognition and judgment of history as a key to the smooth development of Sino-Japanese relations. Again, burden of ACWs as a matter of Japanese aggression against Chinese people were stressed (MFAC 2011). Koizumi recognized the responsibility and declared that Japanese government will properly deal with incidents resulting from ACWs and its victims (MFAC 2011). ACWs incidents are thus to a large extent increasing the burden of Sino-Japanese relations.

Public involvement in the issue of ACWs destruction is crucial. Margaret E. Kosal is presents three reasons why public impetus matters. First, public involvement could bring impetus in relation to chemical weapons destruction. The second promise to be considered is the value of a supportive public, which helps the governments to fulfill its (sometimes costly) obligations under CWC. And third, public involvement may affect the overall process of negotiations (Kosal 2004: 120). As we can

see in the case of ACWs, public involvement helped with bringing this issue on highest political level. As Margaret E. Kosal notes, to date of Qiqihar accident, *“the involvement of Chinese citizens in chemical weapons issues has principally taken the form of litigation aimed at the Japanese government for injuries sustained from exposure to abandoned weapons”* (Kosal 2004: 138). In response to Qiqihar, Japanese citizen offered financial help to the victims of accidents involving ACWs, in contrast with decisions of Tokyo court, which is consistently rejecting compensations claims by Chinese victims (The Associated Press 2010). If one includes in the count around two thousand possible victims of ACWs in China, each claiming a “few” millions Yen in compensation, the question of precedent setting comes to mind. However, from an international point of view, Japan is not the only country solving such litigations. There are tens of thousands of US soldiers who served in Vietnam, who suffer consequences after the use of Agent Orange (A dioxin-laden herbicide) and also a high number of its victims in Vietnam, claiming compensation.

Accidents are far from being the sole obstacle. Also on the Japanese side, some problems occurred. With progress and development of ACW programs, in 2004 the Japanese Government decided for an outsourcing of ACW activities and signed a contract with the Abandoned Chemical Weapons Disposal Corporation (ACWDC) as a sole firm to strengthen the implementation of programs. ACWDC received a contract for 74 million dollars, however, it had been accused of skimming funds by padding bills sent to the Japanese government through the inclusion of “expenses” for the work of invented subcontractors (WMD Insight 2008). Around one million dollars has been misused and corruption scandals soon developed into huge affair when five officials connected with the ACWDC were arrested (Montgomery 2008). The ACWs became a politicized issue, damaging the government performance. It is important to note, that from 1955, the ruling Liberal Democratic Party in Japan has received big support from organizations that downplay or deny use of chemical or biological weapons in China during World War II and there are opponents of such behavior in the Democratic Party of Japan as well (Monahan 2008). Another reason why the LDP is not playing much more of an active role in ACWs removal is that party is composed of several fractions. One of the supporting groups is the nationalistic Shrine Association representing a million members and 80 thousand Shinto shrines. This conservative organization opposes compensation of sex slaves and other victims of war crimes, while continuing to insist that Japan fought on foreign territory to “liberate its neighbors from Western colonialism.” Matthew Forney Harbin and Velisarios Kattoulas mention in this context Nobunao Tanaka who claims that half of the LDP parliament members accept contributions from the Shrine Association or attend its events (Harbin and Kattoulas 2002). Similarly, as could be observed in the position of the LDP towards the 1995 Diet final resolution on World War II, when the LDP and the largest opposition party Shinshinto (New Frontier) refused

references about Japan's domination or aggression or label as aggressor, because in its point of view, Japan was the victim of nuclear bombing and the forced deportation of 600 thousand men to Siberia (Awaya1998: 223). Thus, the problem of ACWs in China strongly touches on nationalism and reconciliation and interpretations of the past, two hot topics on the Japanese political scene (for more information see Mukae 1996: 1011–1030).

It is a question how much the CWDC Affair contributed to slowing down the process of the ACWs removal. However, this could serve as one of the excuses of the Japanese government not to meet the 2012 deadline. The problem of the ACW in China is thus deeply interconnected with the reconciliation of past history between two countries, which remains a very sensitive issue. The government, in order to avoid further criticism, decided to select new contracting companies through general competitive bidding. Thus the Cabinet Office is directly in charge of ongoing programs (ACWO 2011b).

Slow progress in the ACWs excavation and recovery is not only matter of practical, political or legal issues, but also an environmental one. The weather in the North-East of China makes it difficult to carry out the work on excavation sites for five months a year (Delegation of Japan 2008). For example, natural forces had to be dealt with by 6<sup>th</sup> excavation and recovery mission in Xinyang City in Henan Province conducted in August 2004: *“During the preparation period, it rained heavily on 4<sup>th</sup> and 5<sup>th</sup> of August, and the area in which negative pressure tents were set up became inundated with 1.5 meter deep water, which hampered the preparation work.”* (ACWO 2004). Because of high temperatures going up to 30 degrees during the day and closeness to residential areas, excavation works were carried out during the night (ACWO 2004).

In 2005, there started trilateral meetings among Japan, China and the OPCW Technical Secretariat, where Japanese ACWs declarations and the future verification mechanism for destruction facilities were discussed, and improvement of transparency of ACWs destruction process (PRC 2008). Even when the first excavation works started at a new location near Ning'an city, Heilongjiang province in 2006 (Money Control 2006), it was evident that it is impossible for Japan to destroy all the ACWs till the deadline set by the CWC to 2007. Therefore, Japan and China jointly requested a five-year extension of the deadline and the request was approved by the OPCW Executive Council (MFA 2008). As of February 2008, China has assisted Japan in 104 on-site excavation, identification and recovery operations, with around 44 thousands items of CW confirmed and packed (PRC 2008). ACWs destruction process was thus far from finishing.

## 5 2010 and on: ACWs destruction

In April 2007, an agreement on the establishment of the Japan-China Joint Organization for the Destruction of Japanese ACWs in China was reached. The Joint Organization will serve as the main implementing body of Haerbaling projects, where the situation of ACW is worst (PRC 2008). The creation of this Joint Organization has been viewed as a very positive step *“that will help maintain the momentum for uninterrupted continuation of the destruction program”* (WMD Insight 2008). In order to intensify ACWs destruction, where weapons are in small quantities, China and Japan agreed to use mobile destruction facilities (PRC 2008). The System consists of units for pre-treatment, detonation, off-gas treatment, utilities, ventilation etc. able to use thermal or controlled explosion method of destruction. All the System could be packed into the container (Nishi 2007). On 1<sup>st</sup> September 2010, an opening ceremony took place Nanjing, celebrating the start of destruction of ACWs in China (OPCW 2010). This opening could be another milestone, shifting activities from excavation and recovery to destruction. In total, more than 120 bilateral investigations took place (Associated Press 2010). By ongoing destruction, it is hard to estimate, how much the entire clean-up will cost. However, several estimates<sup>1</sup> had been made, ranging from 1 billion dollars to almost 90 billion dollars in 1996 prices. (Evans 1997). Ten years later with the increasing knowledge about the problem, it could be estimated, that costs will not exceed a “few” billions dollars (Risen 2010). Today (May 2011) it is evident that Japan will probably not fulfill its obligations to destroy all ACWs in China till spring of 2012. However, bearing in mind obstacles regarding the historical project, another request for deadline extension could be expected.

## 6 Conclusion

It took two decades since the first formal request made by China on Japan to destroy the first ACWs in China. From a human life point of view, it is a very long time. However, some evil acts committed between the two nations require lots of time to be reconciled. Thus, the ongoing ACWs destruction is a huge success from a historical point of view. Not all countries take the historical responsibility and pay their debts made by the evil of former regimes. The use of chemical weapons in China during The Japanese Imperial Era was for a long time taboo and it took a even longer time for Japan to even admit that they had used them. Japan accepted its responsibility in early 1990s, when mainly a bilateral form of cooperation developed. Following the Memorandum of Understanding between the two countries, the first excavation and recovery works started. At the same time, many practical problems had to be solved, slowing down the excavation and recovery activities. Since the

Qiqihar incident and later corruption scandals, the ACWs has become a much politicized issue. After almost ten years of excavation and recovery works on more than 60 locations in 16 provinces, the ACWs destruction process started in 2010.

The case study above provided answers to the main research question of ‘*How the issue of ACWs developed between Japan and China?*’ We can extinguish four phases in ACWs issue development between the two countries. Origins of the problem could be dated between 1945 till 1990, when buried ACWs were accidentally discovered and preliminary attempts of their destruction in China were made. After 1990, an initial phase (1990–1999) started. Japan accepted its obligation and the first problematic issues were solved. During the following phase, which could be named as excavation and preparation (2000–2010), a higher level of medialization and politicization of the issue might be observed. The last phase, marked by 2010 and on is very young, still unwritten, however it marks a turning point in the ACWs issue, because the ACWs started to be destroyed.

Also factors related to the second question presented in the introduction (*What are the main factors influencing cooperation?*) were discovered. The opening issue of the ACWs on a diplomatic level and international involvement of the OPCW are essential external factors. Public and media involvement (especially after Qiqihar accident) seems to be essential internal factors, although the border between internal and external is in this case not clear. The role of the LDP in the ACWs demilitarization seems to be crucial, however difficult. On one hand, the Japanese Government is trying to satisfy international calls for taking responsibility of its ACWs, on the other hand is limited inside its internal borders as represented by domestic public support and the opinion of electorate. Changes of the views among LDP supporters about Japanese past could push the LDP to be much more active in participation in the ACWs destruction. The question is, if the Japanese people and politicians can change their perception of such a sensitive chapter in Japanese history. Despite the process of reconciliation with the past, in the last decades a positive change could be observed in public thinking. Public solidarity with the victims of ACWs accidents is a positive step towards an increase in public awareness about this issue. As Margaret E Kosal claims, public support is essential.

The story of ACWs could serve as an example for other countries how to reach possible reconciliation and cooperation in problematic issues or how to tackle similar problems in other parts of the world. Thanks to responsibility and openness, it was possible to solve this problematic issue and slowly start to remove this burden from the relations of two countries.

## Note

<sup>1</sup> Total costs of ACWs destruction is also disputed and politically sensitive issue.

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