European Parliament

The Legacy of Agent Orange

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Addressing the Legacy of Agent Orange in Vietnam

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Good morning ladies and gentlemen. I want to thank Member of the European Parliament Jan Zahradil, who also chairs the EU-Vietnam Friendship Group. Thank you for your initiative in bringing this subject before a European audience. Ambassador of Vietnam Vu Anh Quang and Chris Gyskens, president of the Belgian branch of the International Association of Victims of Agent Orange. I’m honored to share the program with you and I look forward to your remarks.

Ladies and Gentlemen: Agent Orange— During the Vietnam War, Agent Orange and similar herbicides were sprayed from aircraft. They were designed to defoliate and thereby kill forests and crops in opposition-held areas. The U.S. military saw Agent Orange as a tool for denying cover and food to the enemy. The spraying reached its peak in 1968—now a half century ago.

Today, there are few visible reminders of what the Vietnamese call the American War in Vietnam. Vietnam is a rapidly urbanizing and increasingly prosperous country of 95 million people. If it were somehow set down in Europe Vietnam would be the second largest European country after Russia in terms of population. In Southeast Asia, Vietnam is the European Union’s second largest trading partner after Singapore. However, as we are reminded here in Belgium, wars cast long shadows. The effects remain long after the guns fall silent and the soldiers leave the field of battle. This is the case with Vietnam. The lingering legacies of unexploded ordnance and Agent Orange burden the Vietnamese people.

Much of the Agent Orange it turned out, was contaminated with dioxin, a chemical which is toxic to humans in even minute amounts. It shortens the lives of people who were intensively exposed. The Vietnam Red Cross estimates that between 2.8 and 4.3 million people were directly
exposed. And birth defects, congenital malformations, attributed to dioxin, have been reoccurring in generation after generation of Vietnamese families.

When I arrived in Hanoi in 1997 to head the Ford Foundation grant making in Vietnam, officials in both the Vietnamese and U.S. governments were unable to talk about Agent Orange/dioxin in a way the other side saw as constructive. They were deadlocked over what to do about it. For NGOs in Hanoi in the 1990s, this terrible war legacy was the third rail in the metro—you touch it, you’re dead.

Sometimes such sensitive topics are ideal places for philanthropy to try to help. Over time I was able to use Ford Foundation resources to get a wider array of people in the two governments and the NGO community working on solutions. Those solutions focused on the needs, not on the causes. At the same time Vietnam was quietly allocating more and more budget to help persons they regarded as victims of Agent Orange.

There is progress on Agent Orange in Vietnam but we have not reached the end of the legacy yet. Our book, From Enemies to Partners- Vietnam, the U.S. and Agent Orange, sends a strong message -- the two governments should work together, for both practical and moral reasons.

Speaking of partnership, this is my co-author, Dr. Le Ke Son, on my left. Dr. Son is a medical doctor with a PhD in toxicology. He was the Government of Vietnam’s point person in dealing with the U.S. on Agent Orange before he retired in 2014, That’s when we decided to write the book. In this photo we’ve just finished a book talk in Ho Chi Minh City for the Vietnamese edition of From Enemies to Partners which appeared in August.

In the remainder of my remarks this morning I’ll talk about the magnitude of the spraying of Agent Orange, the scope of its impact, the beginning efforts to deal with the impact, the obstacles we’ve overcome, and the challenges that remain.

Now let’s begin. This photo is of an Agent Orange drum storage site at an American base in Vietnam during the 1960s. You’ll notice the orange stripe around each barrel. There were several different formulations of herbicides, each with its color code. “Agent Orange” has come to mean them all.
During the Vietnam War massive amounts of Agent Orange and similar herbicides were sprayed inside the boundaries of then-South Vietnam—shown on this map—and in bordering areas of Laos and Cambodia. The orange areas show where the spraying was done—mostly along the coast and borders and in some of the mountainous areas. The orange or sprayed areas are equivalent to about 80 percent of the land area of Belgium.

Da Nang in the north, Phu Cat in the center and Bien Hoa near Ho Chi Minh City were the principal hubs for the spraying.

Over nine years the U.S. sprayed 74 million liters of herbicide over 26,000 square kilometers, releasing 366 kgs of dioxin into the environment. The spraying ended in 1971 and the Vietnamese reunited North and South in 1975, but they soon began to realize something was wrong.

American veterans were reaching similar conclusions.

The young woman you see with me in this picture is Hoa. We are in Quang Tri province in central Vietnam, or what was known during the war as the Demilitarized Zone, or “DMZ,” between the then North and the South.

The DMZ is a bit of a misnomer. It was the scene of some of the most intense and prolonged fighting of the whole war and in the course of this, everyone in the area—Vietnamese soldiers, American soldiers, and just ordinary civilians—was drenched repeatedly and thoroughly with Agent Orange.

Hoa was born with birth defects—foreshortened arms and legs—but she is fortunate. She has learned to live independently. She and her sister, who has a similar disability, want to set up a coffee shop in her home. Hoa cheerfully discussed this prospect with me. It would cost about $800. Since this picture was taken, Hoa has married; she and her husband have a 4 year old daughter, born with no birth defects.
Hoa is considered to be a victim of Agent Orange. There are many thousands of others like her in Vietnam—children and young adults born long after the end of the war, and often with even more severe physical and mental disabilities.

**Chau in his studio slide**

Le Minh Chau, pictured here, grew up in an orphanage for Agent Orange victims in Ho Chi Minh City. Chau aspired to become an artist, and his breakthrough moment came when he realized he could learn to paint by gripping a brush in his teeth. He overcame many challenges and now is a successful artist and lives independently. A young American film maker, Courtney Marsh, met Chau in the orphanage. Her documentary film about him, “Chau, Beyond the Lines,” was nominated for an Oscar in 2016.

**Two sisters in central Vietnam slide**

Most others are not so fortunate. These women are sisters. They have both physical and mental disabilities and live with their families in central Vietnam. Their families will need to care for them for the rest of their lives.

**Young man in central Vietnam slide**

This young man also lives in central Vietnam. He too has severe disabilities which drastically limit his life prospects. His family too will be caring for him for the rest of his life.

I show these difficult pictures because it’s the only way for people to really understand what this issue is all about. The heart of the Agent Orange issue is large numbers of severely disabled people.

Vietnam has a program of assistance for Agent Orange victims. In 2016 that program paid the equivalent of $270 million dollars in allowances to 335,000 of their war veterans who suffer from the same diseases as American veterans or whose children were born with congenital deformities. An additional 465,000 Vietnamese Agent Orange victims receive help through funds raised by the Vietnam Red Cross, the Vietnam Association of Victims of Agent Orange (VAVA), celebrities and local businesses.
As for the U.S., in 2015 the Department of Veterans Affairs paid $24 billion dollars in disability compensation to 1.3 million veterans who served in the armed forces worldwide during the Vietnam era. 528,000—about 40 percent of them— were soldiers who served on the ground in Vietnam and later developed one of more than a dozen illnesses associated with exposure to dioxin. Some of their children, and now their grandchildren have been impacted but for the most part do not receive U.S. government assistance.

Polarized sides slide

The U.S. and Vietnam opened diplomatic relations in 1995.

For a number of years thereafter the United States refused to discuss the Agent Orange legacy with Vietnam.

A former American ambassador to Vietnam told me that after 1995, quote, “There was a lot of resistance in the United States because of the lack of any scientific proof that the kinds of disabilities the Vietnamese government was attributing to Agent Orange could actually be established through scientific research. There was also great concern about the possibility of legal liability resulting from the use of Agent Orange.” In consequence in the late 1990s the State Department instructed its diplomats in Vietnam not even to use the words “Agent Orange.”

Le Van Bang, the first Vietnamese ambassador to the United States in modern times, said this: “We raised the [Agent Orange] issue many times, especially whenever we [had] the human rights dialogue. This is one issue that we must raise in the dialogue, you know? And the United States, when they criticize Vietnam about human rights, we take this one and the United States is a little bit weak on this issue. And so I raised it many times. Of course the government asked whenever we have a high delegation [of Americans] coming, in the agenda must be Agent Orange. That is something that I must say [is] sacred to Vietnam, not to aim at criticizing the United States but to aim at how to cooperate to help these victims.”

The conversation on Agent Orange remained deadlocked between the two governments for a long time. Up until 2007, we had a stalemate:

First, the U.S. government refused to accept any responsibility, fearing that to do so would encourage thousands or even millions of legal claims by Vietnamese citizens for reparations.

Second, the Vietnamese government argued that seemingly anyone in Vietnam who suffered a birth defect was a victim of Agent Orange, and that large areas of the country remained contaminated.
In 2007, we achieved a breakthrough. Why?

First, the Vietnamese Ministry of Health and Hatfield, a Canadian environmental consultancy had identified three former U.S. airbases at Phu Cat, Da Nang and Bien Hoa as the places where residual dioxin was most concentrated and likely to cause continuing harm. The finding that dioxin was a point-source problem that could be addressed with existing technology provided the key opening when President George W. Bush came to Vietnam for APEC in 2006. He and Vietnamese President Nguyen Minh Triet agreed that something should be done—in partnership.

Second, the U.S. government began ramping up compensation to American veterans who were exposed to Agent Orange, and who were suffering from serious illnesses. Agent Orange disability payments to U.S. veterans of the Vietnam War are, as I mentioned a moment ago, in the billions of dollars. It became increasingly clear that the U.S. government was applying a double standard to U.S. veterans versus Vietnamese.

Several individuals also contributed importantly to the breakthrough.

In 2007 Senator Patrick Leahy of Vermont began to push appropriations through Congress to support dioxin clean up, and as he has done each year since then, insisting that a portion be used to help Agent Orange victims.

The government of Vietnam appointed Dr Le Ke Son to lead discussions with the United States. Dr Son saw that it was possible to break this complex problem apart and work first on the more manageable parts.

Ambassador Michael Marine was the third American ambassador to Vietnam but the first to make progress on Agent Orange a priority of his ambassadorship. He said he felt the U.S. had a moral obligation to address the Agent Orange legacy.

Susan Berresford, the president of the Ford Foundation, backed my plan to provide substantial new funding for activities that would get Americans and Vietnamese started working together on projects. These projects addressed the impact of Agent Orange/dioxin on human health and well-being and the residual dioxin at the Da Nang airbase.

So as a result the two governments grew closer but not quite close enough. It was not a complete breakthrough but at least the two sides could begin to talk more constructively and work more productively with each other than they had done previously.
Here we have the funding story since 2007. First notice the brown line, which rises and falls. This was the early money. Ford Foundation provided $17.1 million in grant assistance for Agent Orange in Vietnam. We also mobilized other American foundations, businesses, the U.N. and some foreign governments. Together we got good projects going.

This early money encouraged the U.S. Congress, led by the Senate, to channel larger sums of money to the State Department and USAID and require them to use it in Vietnam for Agent Orange. Since 2007, Congress has appropriated $231 million for Agent Orange in Vietnam—three-quarters of it to clean up the dioxin at the Danang Airport and one-quarter targeting Vietnamese with disabilities.

Here is the environmental status today of residual dioxin in Vietnam: Residual levels of dioxin in the soil are no longer dangerous. The measured levels are below the standards which would trigger the need for a clean-up. These data appear in chapter 1 of our book if you would like to learn more. The only exceptions have been the three former American airbases at Da Nang, Phu Cat and Bien Hoa, shown on this map. The dioxin residues at Phu Cat, with UNDP assistance, have been placed in a secure landfill. The Da Nang Airport is now free of dioxin. The cleanup of Bien Hoa will be launched in March 2019.

The highest recorded levels of dioxin in Vietnam were in fact at these three places: 238,000 ppt, 365,000 ppt and 962,000 ppt at Phu Cat, Da Nang and Bien Hoa.

As the concentrations of dioxin increased, so did the volumes of contaminated soil, again at the same three places: 7,000ppt, 90,000 ppt and 495,300 ppt.
A joint project at the Da Nang Airport successfully remediated 90,000 cubic meters of dioxin-contaminated soils in this treatment facility.

This is an aerial view of the Bien Hoa Airbase, with the areas of dioxin residue shown in red. The airbase is about 30 kms. upstream from Ho Chi Minh City. Vietnam and the U.S. have just reached agreement on the next phase of addressing the Agent Orange environmental legacy -- to clean up the nearly 500,000 (495,300) cubic meters of dioxin-contaminated soils and pond sediments at Bien Hoa.

On October 17th Secretary of Defense James Mattis endorsed U.S. participation in the clean-up of Bien Hoa. He told his Vietnamese counterpart in Ho Chi Minh City, "I came to show the support of the Defense Department for this project and demonstrate that the United States makes good on its promises." The Bien Hoa clean-up is projected to cost $390 million over the next ten years. Vietnam has pledged $90 million. The U.S. will provide $300 million, half of which is to be provided by the Department of Defense and half by the State Department/U.S. Agency for International Development (USAID).

The new agreement publicizes and endorses further U.S.-Vietnam cooperation on remediation of environmental dioxin and it further normalizes military-to-military relations.

However it is one thing to decontaminate soil and sediment and quite another to build Vietnamese organizations and systems which will sustain severely disabled people over their lifetimes. The U.S. needs to pursue with vigor assistance for the severely disabled Vietnamese: the Agent Orange victims. A successful cleanup of Bien Hoa by itself will not lessen nor bring to an end Vietnamese concerns about the human legacy of Agent Orange in their country.
Appropriations language slide

But for the moment American health and disability assistance follows these guidelines laid down by the U.S. Congress.

“Funds…shall be made available for health and disability programs in areas sprayed with Agent Orange and otherwise contaminated with dioxin, to assist individuals with severe upper or lower body mobility impairment and/or cognitive or developmental disabilities.”

The partnership with the Vietnamese has moved along on two legs:

Under the leadership of Senator Leahy, every year Congress makes appropriations for Agent Orange in Vietnam to overcome the fact that successive U.S. Administrations have not put funds for this purpose in the President’s annual budgets.

USAID services slide

USAID uses these funds to provide in-kind assistance to the severely disabled people in the heavily sprayed provinces and to build the capacities of local support services. USAID channels the funds through local and American NGOs; it does not provide grants to Vietnamese government social service agencies.

Vietnamese people believe that the Americans should help all victims of Agent Orange. Thus, Vietnamese government leaders have sought to include more aspirational language for the long term in the joint communiqués of recent high level visits, only to be rebuffed by the American side. Vietnamese diplomats and officials who follow U.S. affairs closely recognize how annual congressional appropriations have permitted the U.S. to deal with its own political and bureaucratic sensitivities and contradictions. They are resigned to dealing with the U.S. on a year-to-year basis: “This year we have this amount of work to do.”

Linh Pham talking with disabled boy- Closing slide

To close, we can see important progress on Agent Orange in the last 11 years. We see active bilateral cooperation in which both sides have moved to more clarity and specificity and to a shared sense of responsibility for a humanitarian response. The dioxin residues at Phu Cat and Da Nang airbases are now history. Several tens of thousands of Agent Orange victims have been helped. But this progress has been achieved largely by a relatively small number of individuals in both countries working on it year by year. And the sums are small in relation to the needs.
A fuller resolution of the Agent Orange legacy by the two governments still lies on the horizon.

Senator Leahy speaks about recognizing a moral obligation. What would that mean?

From the U.S. side, a president at some point needs to say, “We shouldn’t have done that. We shouldn’t have done that…. We’re going to make resolving the Agent Orange issue a priority in our relationship with Vietnam.” He needs to put funds for it in his budget. If it’s in the president’s budget, this is a U.S. priority. Right now it’s not. Of course the president is not ultimately responsible for appropriations, but if the president wants it, it will happen.

As for the Vietnamese, they at some point need to decide that OK, we now have a strong enough relationship with the U.S. that we’re going to deal with this last legacy issue right now. At that point they need to say to the United States, “You know, our two governments have dealt successfully with so many other issues since 1995. Agent Orange is now the one issue we want to see really your priority, and that’s about the United States coming to the table with significant money to help our disabled population.”

In sum, the recent bilateral agreement to fully and finally remediate the dioxin at Bien Hoa provides a model for the future. We now need an agreement on a joint program that reaches, benefits and sustains Vietnam’s victims of Agent Orange.

Thank you.
The Legacy of Agent Orange in Vietnam
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Charles R. Bailey, Former Director
Agent Orange in Vietnam Program, Aspen Institute
The thoroughness with which Son and Bailey examine the Agent Orange/ dioxin situation is spellbinding. They have assembled a wealth of data that arguably amounts to more information on the topic than may be found in any other single publication.

--Vietnam Veterans of America

A marvelously concise yet thorough rundown of an issue with significant geopolitical ramifications. The authors unflinchingly discuss the extraordinary physical and mental effects of Agent Orange...consider the successes and failures of the bi-national cooperation to assist the victims.

--Kirkus Reviews

There are no two people more qualified to speak on this subject than Charles Bailey and Le Ke Son. Their work has changed lives for the better. It has taken patience, perseverance and cooperation. We can all learn from their example.

--Christine Todd Whitman, Former Governor of New Jersey and Administrator of the U. S. Environmental Protection Agency.
1960s- Orange-banded drums of Agent Orange at a US military base in Vietnam
Areas Sprayed with Agent Orange and Other Herbicides, 1962-1971
Summary

Total Area Sprayed- 26,313 sq.km.

Total volume of herbicides- 73.8 mn. liters

Dioxin released- 366 kgs.

Main staging areas- Phu Cat, Da Nang & Bien Hoa Airbases

Only Justice!..............Only Science!
Since 2007 the U.S. and Vietnam have made remarkable progress in jointly addressing the legacy of Agent Orange in Vietnam

- Remediation of dioxin-contaminated soils and pond sediments
- Assistance to Vietnamese with disabilities regardless of cause
Dioxin Clean Up and Health/Disabilities Services in Vietnam, 2007-2018 with Funding from the U.S. Government and Other Sources

Former American Airbases with Dioxin Levels Requiring Cleanup, 2012-2028
## Dioxin Contamination at the three Agent Orange /Dioxin Hotspots in Vietnam

<table>
<thead>
<tr>
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<th>Phu Cat</th>
<th>Da Nang</th>
<th>Bien Hoa</th>
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<tbody>
<tr>
<td>Highest recorded levels of dioxin</td>
<td>238,000 ppt</td>
<td>365,000 ppt</td>
<td>962,559 ppt</td>
</tr>
<tr>
<td>Total volume of contaminated soil &amp; sediment</td>
<td>7,000 m³</td>
<td>90,000 m³</td>
<td>495,300 m³</td>
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<tr>
<td>Cost of clean up</td>
<td>$5 million</td>
<td>$112 million</td>
<td>$390 million (estimated)</td>
</tr>
<tr>
<td>Clean up completion date</td>
<td>2011</td>
<td>2017</td>
<td>2028</td>
</tr>
<tr>
<td>Location</td>
<td>Soil Levels</td>
<td>Sediment Levels</td>
<td>Total Volume</td>
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<tr>
<td>Bien Hoa</td>
<td>962,559 ppt TEQ</td>
<td>5,970 ppt TEQ</td>
<td>495,300 m³</td>
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<tr>
<td>Da Nang</td>
<td>365,000 ppt TEQ</td>
<td>8,580 ppt TEQ</td>
<td>90,000 m³</td>
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<tr>
<td>Phu Cat</td>
<td>238,000 ppt TEQ</td>
<td>201 ppt TEQ</td>
<td>7,000 m³</td>
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</tbody>
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Bien Hoa Airbase, Vietnam
(Dioxin-contaminated areas shown in Red)
October 17, 2018- U.S. Secretary of Defense James Mattis and Vietnamese Minister of Defense Ngo Xuan Lich Agree to clean up the Dioxin at the Bien Hoa Airbase
“[T]he funds appropriated by this Act...shall be made available for health and disability programs in areas sprayed with Agent Orange and otherwise contaminated with dioxin, to assist individuals with severe upper or lower body mobility impairment and/or cognitive or developmental disabilities.”
Clinical Examination for Persons with Disabilities
Dong Phu - Binh Phuoc, Tue 27/2 - 1/3/2017