

Interviewer: Please tell us what led to the establishment of this organization.

JMAS: Mr. Yoshinao Doi, the first Vice Chairman of Japan Mine Action Service (JMAS), and Mr. Nagao Nishimoto, who were former members of the Japanese Self-Defence Forces. They established this organization using their own money.

It all started when the Japan International Cooperation Agency (JICA) went to the Cambodia Reconstruction Branch to provide support in Cambodia. At that time, they were asked, 'Why isn't the Japanese Self-Defence Force coming?' This became a major motivation for us to establish this organization.

Before that, a Peacekeeping Operation (PKO) mission was conducted. They saw NGOs from other countries, mostly made up of ex-military members, already working to clear the landmines. With all that happening, someone asked them why Japan wasn't there. That was the real turning point. After that, encouraged by a specialist at JICA who had a background in the Self-Defence Forces, Mr. Doi inspected the situation in Cambodia.

Interviewer: What was the situation like?

JMAS: Initially, he thought, 'I can't do this,' because it was too difficult to handle. However, after seeing the actual conditions, he returned to Japan determined to do it.

I believe that the high expectations were due to Mr. Yamamoto, who had retired from the Self-Defense Force and started working with JICA. He was the one who extended the invitation, stating that people from other countries were asking Japan to come.

Interviewer: And why do you think the people over there wanted Japan to do it?

Perhaps it was a matter of technology? I don't know. Perhaps because Japan was involved in the PKO, I imagine it was an extension of that. They had achieved significant results there, so maybe there were expectations based on that. Before going, Mr. Doi thought it was impossible, but by the time he returned, he was ready to act. However, because of the lack of funds, he couldn't start immediately.

They couldn't start because they had no money, so they first began with the disposal of unexploded ordnance (UXO). Disposing of UXO costs less than clearing landmines. While landmines require manual searching using metal detectors, UXO only requires receiving a report, recovering the ordnance, and disposing of it. When the activities first began, the number of casualties caused by landmines and unexploded ordnance was nearly equal.

They figured that just handling the UXO would be effective, so they established the 'Japan Mine Action Service' (JMAS). For the first 3-4 years, they ran the organization using their own private funds. However, once they began showing good results, they were able to receive subsidies from the Ministry of Foreign Affairs and officially started full-scale landmine clearing operations.

Even looking globally, there are a few groups like the Hazardous Area Life-support Organization (HALO) or the Mines Advisory Group (MAG), but the biggest difference between JMAS and them is that we actually go to the site. We go to the field and work alongside them the whole time. They rarely go out to the actual sites. They hire people

to do the work, but we make it a point to work alongside the locals throughout the entire activity.

Interviewer: Looking at the materials you sent, and the website, you do events and activities in Japan, but the primary work is overseas, so you don't do the disposal work in Japan, right?

JMAS: Our field activities are primarily overseas, and in Japan, we focus on hosting events to raise financial support, handling training programs, and delivering lectures. These days, schools contact us about school trips. For school field trips, we mainly host junior and high school students. University students, however, participate in on-site training where they work alongside experts and experience the entire process of disposal, right up to detonation. During the summer vacation period, we have many opportunities, and we also run tours for university students. Furthermore, as part of our awareness-raising activities, foreign NGO organizations are introduced to us through the Ministry of Foreign Affairs, and we handle the arrangements and responses for them.

Interviewer: That's a wonderful opportunity. In which countries do you carry out activities, and what are those activities?"

JMAS: Currently, we mainly focus on Cambodia, Palau, and Micronesia. Our work in Laos has been unfortunately suspended due to budget constraints, but the operations in Cambodia have been continuous since the beginning. We have also worked in Afghanistan, Pakistan, and Angola.

The reasons we stopped in certain places were either a lack of budget or the local situation. In Angola, we operated with governmental funding for six years, followed by three years where we continued our activities using our own private funds, resulting in a total of nine years of operation. The project was finally concluded after the Ministry of Foreign Affairs determined that the work was sufficient.

In Afghanistan, we entered the country for the UN's DDR (Disarmament, Demobilization, and Reintegration) program. We were in charge of disarmament, and once that was finished, we used the former soldiers to perform landmine clearance. However, due to the worsening security situation, we relocated our headquarters to Pakistan, and during that time, we carried out the construction of water supply facilities as part of the Water Supply Improvement Project. We saw that the women and children were struggling just to get water—it took them two hours or more—so we decided to build water supply facilities.

Regarding completed projects, in Laos, we began the disposal of unexploded ordnance (UXO) in 2006. We started in the area known as the 'Ho Chi Minh Trail', where many heavy bombs and cluster munitions are buried, and then moved south to continue our clearance activities. Furthermore, as a public-private partnership project, when the pharmaceutical company Tsumura was establishing a medicinal herb field (for Kampo medicine), we contributed by using local clearance operators to dispose of UXO and prepare the land. This provided local employment and this initiative became a model project for the Ministry of Foreign Affairs.

Then, starting in 2016, we became the first in the world to dispose of large bombs and cluster bombs mechanically, in cooperation with Komatsu. We spent six years using, testing, and improving these machines. Actually, on Project X—the NHK program—last Friday, the last five minutes of the episode featured Komatsu. We use Komatsu machines. While that episode wasn't specifically about cluster bombs, it showed what landmine clearance looks like. You can probably still watch it on catch-up TV.

To summarize, in Cambodia, activities initially followed a community-participation model. We hired local people and trained them, with about half of them being women. We trained them, handled their requests for clearance, and did the work. That was our very first project. Some of those people are now members of CMAC (Cambodian Mine Action Centre). Although Cambodia is well-known for landmines, it's important to know that mines aren't found everywhere. We use the word 'landmines' generally, but along the Ho Chi Minh Trail in Cambodia, there are mostly bombs. You don't see many landmines there. On the other hand, from the south to the west—along the border to the sea—that's where the civil war was fought. In that area, there are many landmines. You find some UXO too, but it's mostly mines. So, we ran two different types of projects: one focused on UXO in the east, and one focused on landmines in the west. Right now, 15 provinces in Cambodia have issued 'Mine-Free Declarations.' To be honest, some of those places didn't have many mines to begin with, so they declared themselves mine-free, but it doesn't mean there's absolutely nothing left. There are still some remaining, but I think the major areas are mostly cleared. The areas that remain are along the border where there is ongoing tension. Along the Thai-Cambodian border, there are mines everywhere. Those areas remain untouched because of various sensitive political issues; we aren't allowed to clear anything within seven kilometers of the border.

Interviewer: How have you reduced the number of incidents?

JMAS: In the early days, since scrap metal could be sold for money, some people earned income by collecting unexploded ordnance. However, the annual number of victims has now been reduced to a few dozen due to the combination of three factors: providing risk-avoidance education to children of elementary school age and above, identifying hazardous areas through interviews conducted using the 'Baseline Survey' method, and the increase in safe areas resulting from the progress of clearance activities.

The reason the numbers dropped is largely due to education. Education is huge. We provide education from elementary school age and up. When we go out for disposal work, we visit various areas. We educate about 1,000 people a year as part of our 'Risk Avoidance Education.' Other organizations educate people, too.

We also conduct 'Baseline Surveys' (basic research) across all of Cambodia. We do large-scale interviews to determine which areas are dangerous and which are safe. Between the research, the education, and the progress of the actual clearance, the numbers have plummeted. Nowadays, most victims are people who accidentally wandered into a marked area.

Interviewer: Is it possible to clear all landmines and unexploded ordnance from Cambodia completely?

JMAS: Although we cannot remain on-site until the clearance is complete, we believe that complete clearance is possible. Our ultimate goal is not to conduct the landmine and unexploded ordnance (UXO) disposal ourselves, but to teach the local people the necessary clearance techniques so that they can do it with their own capabilities. The purpose of our support and education is to foster the local people's ability so that they can carry it out on their own, while simultaneously assisting with the clearance itself. We prioritize providing support to regions that demonstrate the willingness to carry out the disposal themselves. So, in reality, we aren't just a 'Support for Clearance' group. We are a group that supports self-sufficiency. This may be a distinguishing characteristic compared to other organizations.

Interviewer: What is going to happen after the clearance is completed?

JMAS: In 2008, we realized that landmine clearance alone could not bring prosperity to a region, so we began providing regional reconstruction support. Land that has been cleared often lacks a road or has insufficient infrastructure. Therefore, we started by first developing roads and constructing schools to establish a proper educational environment.

Interviewer: What kind of changes occurred in the region as a result of improving roads and schools?

JMAS: Developing roads smoothens the distribution of agricultural products, allowing people to sell their crops. This creates enough financial leeway to send children to school, generating a positive cycle. Through these efforts, we have developed approximately 10 schools and 100 kilometers of roads. Because Cambodia has limited paving materials, a resource called laterite is located and used locally. Roads are built by negotiating with landowners to collect laterite. Drainage ditches are also constructed to ensure water runoff, creating durable roads.

Interviewer: Please tell us more about agricultural support.

JMAS: These projects have been funded by Komatsu since 2008. Starting in 2019, we began farmland development so people could thrive even more. Specifically, by levelling the farmland and improving irrigation channels so that agriculture could be carried out on cleared land, we promoted the growth of rice cultivation. In 2021, we further expanded agricultural support into deeper, more remote areas near the borders of Thailand and Laos. To help local farmers earn a living on the land cleared of landmines, we created demonstration farms that used the land's specific characteristics, setting an example for them. Before, it was just about preparing the soil, but now we teach them the actual farming methods so they can feed themselves.

We also visited individual farms to provide guidance. We first taught the importance of working cooperatively, then instructed them on how to make organic fertilizers using local resources such as chicken manure, supporting farmers so that they could become self-reliant and ultimately prosper. Because many members of our organization are former Japanese Self-Defence Forces personnel, and we do not have specialized agricultural knowledge, we hire external agricultural experts and work with them. We look for 'specialists' through the internet and referrals, and have established guidance

methods suited to local conditions. Making use of specialized knowledge and conveying concrete techniques to farmers is important.

Interviewer: Please tell me about the elementary school initiative.

JMAS: In this initiative, most of the funding is provided by donations from Komatsu. From this funding, we built a primary school. For the graduates of that school who go on to university, Komatsu has started a program to cover their tuition for four years. It just started, but it's a great support system. It's incredible. Komatsu's funding has very clear purposes. It's not just general agricultural support; it's specifically for things like land levelling (flattening the fields) using construction machinery, or for the school. Since the donations are earmarked for specific goals, we execute the projects accordingly. That's the summary for Cambodia.

Interviewer: Can you tell us more about the activities in Palau?

JMAS: Palau is very pro-Japan. During World War II, it suffered heavy air raids. Many Japanese 'requisitioned ships,' civilian ships drafted into military service, are sunken there. Until last year, we worked on a shipwreck called the 'Helmet Wreck.' It got that name because there were so many steel helmets found inside. This ship was carrying depth charges weighing 160kg each. Over long periods, cracks have formed, leaking a toxic substance called picric acid. Initially, attempts were made to repair the cracks with cements, but this was ineffective. Although each depth charge weighs 160 kilograms, we spent three years raising them from the sea and disposing of them.

Interviewer: How were you able to raise and dispose of depth charges that weigh as much as 160 kilograms?"

JMAS: We use air from scuba tanks to inflate bags. The buoyancy lifts them up. We attach the bags, let the buoyancy do the work, and then pull them onto a boat.

Interviewer: Isn't that dangerous?

JMAS: Very. If the fuses (detonators) are still attached, air contact can sometimes cause ignition. We wrap them in plastic before bringing them onto land. Normally, you would blow them up, but Palau doesn't have a military, and they don't have explosives. So, we use a method where we pour molten iron (thermite) into a hole in the charge to burn the contents away.

Interviewer: So, it burns rather than explodes?

JMAS: Yes, the burning takes time, but that's how we do it. Once the items are on land, we work with an organization called NPA. We finished clearing the Helmet Wreck, which was tilted at a depth of 15 to 35 meters. Now we are clearing other UXO in the surrounding waters. Since this is a famous diving spot, it will make tourism safer and improve the marine environment.

Interviewer: How do you search for underwater bombs and sunken ships?

JMAS: Because they are in relatively shallow areas, it is possible to identify them visually. It's not that deep, maybe 30 meters, so you can often see them clearly. You can see downed planes, too. We also use search technology.

Interviewer: I thought maybe you used sonar or echoes.

JMAS: We do. In Micronesia, as well, we use '3D Underwater Archaeology' and 'Digital Twin' technology. We have mapped out all the locations. We can't dive deeper than 40 meters, but we've identified the major sites. In Micronesia, specifically Chuuk Lagoon (formerly Truk Lagoon), there was a huge Japanese naval base that was also air-raided. We've identified about 15 requisitioned civilian ships within diving depth. These ships are leaking oil. We are currently surveying the condition of the ships and recovering the leaking oil. We use pumps to extract the oil. Because it's light, it leaks out and collects at the top of the sunken ship. We treat the ship like a single unit and recover the oil from it. This work will continue for a long time. It actually started because of a request from the Ministry of Foreign Affairs.

Our maritime business is handled by our 'Underwater Team' divers. They are veterans (OBs) from the Self-Defense Force's Underwater Disposal SBU. Since this requires highly specialized skills, almost all the people involved are our alumni.

Just like in Cambodia, our ultimate goal is for the locals to be able to recover oil and handle ERW (Explosive Remnants of War) on their own. Training divers is a huge part of our mission; it's all about technology transfer. We help with the disposal, but once they can do it themselves, we intend to withdraw. However, it's quite difficult. In places like Cambodia or Laos, there are solid national organizations (like CMAC in Cambodia or UXO Lao). In places where such organizations don't exist, it's a struggle.

Interviewer: Please tell us about your future vision.

JMAS: We recently hit our 20-year mark, so we created a 'Future Vision' for the next decade, leading up to 2030. Without big goals, you just end up drifting. Our redefined mission is to 'Contribute to the creation of a safe and prosperous international society.' To break that down: on the left of the document, you see 'Creation of Peace and Security.' This includes demining, but as I mentioned with our agricultural support, demining alone isn't the finish line. We want to reach the goal of 'human development' and 'city building.' In that context, when considering what to do concretely next, we have identified Senegal as the target for our next project.”

Interviewer: Why did you choose Senegal?

JMAS: About three years ago, we received a request from Ambassador Izawa who was stationed at the Embassy of Senegal in Japan. He said, 'There are landmines in Senegal; we want you to handle the clearance.' At the time, we didn't have the manpower, but we looked into it. Senegal had a civil war that lasted over 30 years, specifically in the Casamance region. It wasn't a war of massive battles, but rather a sporadic guerrilla conflict. Because landmines were planted there, displaced residents cannot return home, and security remains poor. The clearance started around 1990, but after a kidnapping incident in 2013, all international aid and activity stopped until 2022. Several NGOs had pulled out, leaving no funding and no support. Ambassador Izawa was actually asked by the Swiss Ambassador if Japan could help, and that's how he ended up there.

Currently, there are only two groups there: 'H.I.' (Handicap International) and a local NGO called 'HAMAP.' But they only have about 30 people and progress is slow. The Senegalese want to do it themselves—they want their own national organization. Japan

provided two demining machines through ODA (Official Development Assistance) recently. However, the issue is who will operate those machines. Senegal has a strong desire to carry out landmine clearance within its own country and wants to establish a new organization to address this. This aligns with our principle of supporting regions that aim for self-reliance, which is why our intentions matched those of Senegal. We are scheduled to dispatch a team starting in March next year, and we are currently in the preparation phase. It is expected that funding from the Ministry of Foreign Affairs will also be allocated, so we plan to form a new team, provide training, and engage in clearance operations. The landmine clearance machines will be the same type as those originally used in Cambodia, so we are considering dispatching Cambodian experts to the site.

Interviewer: Tell us about your team.

JMAS: We are starting small with a team of about 16 locals, while our team will consist of 7 people. We are using a Ministry of Foreign Affairs budget. We have to set up an office and buy detectors. Our team of 4 Japanese experts will train seven people: three who carry out clearance using machinery, three who conduct manual clearance, and one team leader. We will focus on training and working to enable them to operate independently. In addition, actual activities require more than just clearance techniques. We have to teach them equipment maintenance and management, financial management, and cost estimation for clearance operations. For them to run the organization themselves, we will teach what is required over a period of three years—although in reality, we think it may take about six years.

At present, we are working with CNAMS (the National Mine Action Center of Senegal). They are a government body that manages things but doesn't have an 'execution' arm. We are helping them build that arm. I'm currently doing the planning for the MOU (Memorandum of Understanding) and SOP (Standard Operating Procedures).

The target area in Senegal is smaller in scale compared to Cambodia, maybe 100km square, but due to the 30 years of civil war, landmines have been laid sporadically, making it difficult to identify their locations. There is information that they are buried along roadsides and at intersections, but beyond that, the situation is unclear. Because the land has been untouched, it's overgrown with trees.

I went there last November for the third time. It takes 26 hours to get there—there are no direct flights, so you usually go through Paris. We plan to start full operations next March, with an advance team going in January or February.

Interviewer: How do you find them if it's all overgrown?

JMAS: It's difficult. In some places, they just have ropes marked out. There are rice paddies, just like in Japan. Some areas are open, others are jungle. Unlike Cambodia, where the contamination is well-mapped because of long-term data, Senegal is much less clear. But the local need is incredibly high. When we arrived, the welcome was massive. The security is technically 'Level 3' (Avoid all travel), but even though there were kidnappings in the past, the military is there, and things have calmed down.

The Embassy is supporting us too; I think it's just that kind of place. And honestly, even after 30 years, their desire to return home is... well, it's beyond our imagination. In Japan, after the Great East Japan Earthquake, many people who evacuated once didn't return, right? But people over there really want to return. They have an incredible attachment to their land. When I visited areas where the clearance was finished, I saw people living in shacks they had built themselves. You look at it and wonder, 'Can people really live here?' But they are doing it. Their will to return is that strong.

I realized that when a road is cut off by landmines, if we can clear it and open it up again, we can actually regenerate the entire community. First, the roads, then clearing the areas where they live. There are 'ghost villages' where everyone left, and I believe we can bring them back to life.

Interviewer: So, it's a strategy similar to what you did in Cambodia?

JMAS: Yes, that's right. We do want to aim for that level, but there are also many difficulties. The heavy machinery, the power shovels and demining machines, have been provided from Japan through the ODA program as construction support but even operating the machinery costs money. With our budget, once fuel costs are considered, we can barely afford to operate even one piece of heavy equipment, so it is likely to take a long time."

Interviewer: How do you think the support you are providing is connected to human rights?

JMAS: Landmines themselves are a massive violation of human rights. Our work allows everyone to live a life of equal dignity; eliminating the gap in living standards caused by these weapons is significant. We can all imagine the disabilities caused by mines, such as losing a leg or losing a life. Surviving with a permanent disability is a reality that is simply unbearable to see. It is a natural human feeling to want to do something about it.

This is something I really want to convey to students as well. It may be a slightly unusual way of putting it, but when we talk about organizations that describe themselves as doing "mine clearance," there are three essential components. The first is assistance to victims. The second is prevention, particularly through risk education. And the third is the actual clearance work carried out on the ground, which is what we do. These three elements together define mine action.

Interviewer: We wanted students to clearly understand that this is not only about community development, but also about human rights violations. It is connected not just to the SDGs, but directly to human rights themselves.

JMAS: The major basis and legitimacy of our activities come from the Ottawa Treaty, also known as the Mine Ban Treaty. I believe that the fundamental justification and legitimacy of mine action lies there. And in that sense, the SDGs are also fundamentally grounded in human rights. Some people genuinely cannot attend school because of landmines. In some areas, children are effectively excluded from education. After clearance work was completed, and over the last six years in particular, we have seen clear change: areas without landmines have begun to develop. Economically, these regions were extremely constrained. Places with landmines were left behind, excluded

from development, and almost abandoned. When landmine contamination was severe, no organization would enter those areas. Our organization was the first to do so.

We entered and began clearance work, and when one of our specialists returned years later, a school had been built directly on what had once been a frontline area. During the clearance period, a local landowner built a school for children who previously had none. It is a very modest school with a tin roof. When it rains, everything gets wet. There is no officially assigned teacher; instead, the landowner's daughter, who is a university student, teaches while commuting from her studies. This is the reality on the ground. Even when support is provided, schools like this often lack official recognition, so teachers are not formally dispatched. We do what we can by adding soil to the floor, bringing in teaching materials, and making small improvements so children can learn. Access is extremely difficult. After visiting these schools and returning to the office, there are often three to five kilometers of muddy road. In many cases, it is barely passable. In countries like this, everything is interconnected. Poverty, education, safety, and development — all of these issues overlap. It becomes very clear when you are there.

We also created a landmine-themed product with the help of a designer. A portion of the sales goes toward our activities. It sells for about 1,000 yen, though recently sales have slowed.

Interviewer: Before moving on, there is one more question I'd like to address. You work in Cambodia, Palau, Micronesia, Senegal, and other countries, so why should Japanese students, especially university students, care about this work?

JMAS: Over the years, university, high school, and junior high school students have visited, and they certainly show interest. After all, you cannot live your entire life only within Japan. I don't think this is about lofty ideals or abstract justice. It's a very natural desire — wanting to help, wanting to do something meaningful for places like these.

Japan is a country with limited natural resources. Because of that, contribution and cooperation become important within communities, among peers. We are not driven by money, and we do not always have freedom. At some point, you have to engage with society, or you cannot move forward. Having observed university students myself, I believe many students have a latent desire to use their abilities somewhere unfamiliar, perhaps overseas. They may want to test themselves. Even if they cannot personally clear landmines, the feeling that they might be able to contribute in some way arises naturally. Volunteer activities are also increasingly valued, including when it comes to employment. That may serve as one motivating factor as well.

Interviewer: From your perspective, what would you like to convey to students?

JMAS: From my perspective, what concerns me most is students becoming inward-looking. When I was teaching in Ishikawa, many students said they did not want to leave the prefecture at all. I believe that is a mistake. Ishikawa is a good place, but I tell students to leave once and then come back. If you are going to step outside, encounter a different culture, not Tokyo, not Ishikawa, but another country entirely. Experiencing a different culture broadens your perspective. When you return, your outlook changes, and your personal value grows. That is what I used to tell my students.

There are many people, especially women now active internationally. When I visit organizations like JICA, I strongly feel that young people are working hard in this field. Of course, there are also students who dislike English, who avoid communication, who do not want to go abroad. That is reality. But by engaging with many different topics like this, students often discover interest somewhere along the way. I think this kind of initiative is extremely valuable. I hope it helps awaken students' awareness.

As for what students in Japan can do: direct involvement on the ground is highly specialized and often carries significant risk, so there is a limit to what one can do immediately. However, simply showing interest is vital. For those who can, visiting the field to see the reality with their own eyes can be an immensely transformative experience.

Furthermore, as we touched on earlier, there is the 'plus-alpha' of agricultural support. The mission isn't just about farming; it's about how we utilize land once it has been made safe for the local community. This is where young people, especially those with technical expertise, really have a chance to shine. In fact, Ishikawa Prefectural University has already launched new agricultural projects funded by KAKENHI (Grants-in-Aid for Scientific Research).

When it comes to revitalizing land cleared of mines, the possibilities change depending on your specialty. While some focus on agriculture, others are using AI and drones to develop remote, high-speed mapping of minefields.

Once a student develops an interest in these fields, I want them to consider how they can apply their own unique knowledge or skills. The role each person plays will be different, but there is a place for everyone's specific expertise.

Interviewer: That's great. Thank you very much for your time. We truly appreciate you sharing your valuable experiences and insights with us today.