



香港浸會大學  
HONG KONG BAPTIST UNIVERSITY

THE  
**SOPA**  
AWARDS



# HKBU SOPA

AWARD WINNERS FORUM

香港浸會大學—  
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卓越新聞獎得主論壇

# 2017

# INTRODUCTION

The HKBU-SOPA Award Winners Forum 2017 aims to enhance the standard of journalism education and journalistic practice in Hong Kong and the Greater China region by inviting a panel of SOPA award winners to participate in open lectures and forum on the journalism profession.

The Society of Publishers in Asia (SOPA) is a not-for-profit organization based in Hong Kong and represents international, regional and local media companies in Hong Kong and around Asia. It hosts the prestigious annual SOPA Awards for Editorial Excellence to set world-class benchmarks for journalism in Asia. The SOPA Awards were established in 1999 as a tribute to editorial excellence in both traditional and new media and were designed to encourage editorial vitality throughout the region. The awards cover a broad range of categories reflecting Asia's diverse geo-political environment and vibrant editorial scene.

The Department of Journalism of Hong Kong Baptist University was founded under the School of Communication in 1968. One of the leading journalism schools in Asia, the department offers undergraduate studies in Chinese Journalism, Financial Journalism and International Journalism as well as the MA in International Journalism Studies Programme (MAIJS) offering a Master of Arts in International Journalism and a Master of Arts in Business and Financial Journalism.

# CONTENTS

SOPA Award Received	Title of the Entry	
 2017 Excellence in Investigative Reporting (Award for Excellence)	Still Taking a Cut	<b>P. 5</b>

**Aun Pheap** | Senior Reporter | The Cambodia Daily

SOPA Award Received	Title of the Entry	
 2017 Journalist of the Year 2016 Excellence in Reporting on Women's Issues (Honorable Mention) 2015 Excellence in Reporting on the Environment (Honorable Mention) 2014 Excellence in Reporting on Women's Issues 2013 Excellence in Human Rights Reporting (Award for Excellence)	Blood Mica Women in the Workforce Water Shortages in India Women's Rights in India Trafficked maids to order: The darker side of richer India	<b>P. 11</b>

**Nita Bhalla** | South Asia Chief Correspondent | Thomson Reuters Foundation

SOPA Award Received	Title of the Entry	
 2017 Excellence in Investigative Reporting (Award for Excellence) 2017 Excellence in Human Rights Reporting (Award for Excellence) 2017 Excellence in Information Graphics (Award for Excellence)	Taiwan's offshore fisheries: Fraud, exploitation, bloods and tears of fishing ground 台灣遠洋漁業專題：造假·剝削·血淚漁場 Fraud, exploitation, bloods and tears of fishing 造假·剝削·血淚漁場 Taiwan's offshore fisheries 台灣遠洋漁業的大「鮪」鱸鰻	<b>P. 21</b>

**Cheng Han Wen 鄭涵文** | Journalist | The Reporter 報導者

SOPA Award Received	Title of the Entry	
 2016 Excellence in Digital News (Honorable Mention) 2016 Excellence in Information Graphics (Honorable Mention) 2016 Excellence in Investigative Reporting (Honorable Mention) 2015 Excellence in Digital News (Finalist) 2014 Excellence in Information Graphics (Honorable Mention)	Five Major Risks to Flying in Asia Five Major Risks to Flying in Asia Malaysia's 1MDB Scandal Kowloon Walled City Judging Japan's Experiment	<b>P. 29</b>

**MinJung Kim** | Head of Visuals, Asia | The Wall Street Journal

SOPA Award Received	Title of the Entry	
 2017 Excellence in Video Reporting (Award for Excellence)	IKEA's India Bet Runs Into Thicket of Rules	<b>P. 39</b>

**Preetika Rana** | Asia Corporate Reporter | The Wall Street Journal

SOPA Award Received	Title of the Entry	
  2017 Excellence in Journalistic Innovation (Honorable Mention) 2016 Excellence in Digital News (Award for Excellence) 2015 Excellence in Digital News (Honorable Mention)	After the Flood: Never Let Bygones Be Bygones (2016·洪水暴至) China's Property Market Zhou's Power Base	<b>P. 47</b>

**Huang Chen, Sabrina 黃晨** | Assistant Chief Editor | Caixin.com

**Wei Meng, Ashley 韋夢** | Data Visualization Designer | Caixin.com

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# AUN PHEAP

SENIOR REPORTER

The Cambodia Daily

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Title of Entry  
**Still Taking a Cut**



Aun Pheap has almost 30 years experience as a reporter. He started his career as the Managing Editor of the Southeast Asia Weekly, an English newspaper in Phnom Penh. He has since worked on several publications: The Phnom Penh Post, Cambodia's oldest English-language newspaper; Cambodia News; Cambodia Today; and Business News. He also worked for National Radio of Cambodia. Currently, he is a senior reporter at The Cambodia Daily, specializing in investigations covering a diverse range of issues from land rights to illegal logging.



Enric Catala

A van packed with logs drives down National Road 7 in Tbong Khmum province last week. Dozens of vans like it ply the road daily. This van ended up next to the Daun Roath border gate in Memot district, where local villagers regularly sell the logs to buyers from Vietnam.

## Still Taking a Cut

*On the border with Vietnam, the military plays middleman in the illegal timber trade*

By ZSOMBOR PETER AND AUN PHEAP  
THE CAMBODIA DAILY

SNUOL DISTRICT, Kratie province – In the dusty heart of town, where the main road from the Vietnamese border runs into National Road 7, a two-story billboard inveighs against the evils of illegal logging.

Looming over the crossroads' rickety food stalls and beat-up share taxis, the crude painting shows ea-

ger young men bulldozing virgin forest and chopping into thick, healthy tree trunks. Hovering above the scene in its own private bubble, a forlorn face peers down at them through the bars of a prison cell. Lawbreakers, the sign warns, could face five to 10 years in prison.

Yet every day, from dawn to dusk, and sometimes later, vans and motorbikes packed and stacked with high-grade timber speed past the

sign without a glance—and without a care. Arriving from the north, the vans veer west at the intersection toward border towns in neighboring Tbong Khmum province. The motorbikes take the slight turn southeast toward the local border gate at Tumpeang Sre, an easy 19 km from town.

The government claims that it has all but wiped out the country's booming illegal timber trade since

Prime Minister Hun Sen put the head of the National Military Police, General Sao Sokha, in charge of a special task force in January to root it out, placing a total ban on timber exports to Vietnam in the process. But Vietnamese customs data shows that many millions of dollars worth of timber continues to pour through.

Reporters visiting Cambodia's  
*Continued on page 2*

## Internet Passes TV as Go-To News Source

By MATT SURRUSCO  
THE CAMBODIA DAILY

The internet has for the first time surpassed television as the most important source of news about the country among Cambodians, according to a new study.

Thirty percent of respondents this year said the internet, and Facebook specifically, were their go-to news sources compared to 29 percent who said they got most

of their news from TV. Last year, a quarter of those surveyed cited the internet and social media as their key news sources, compared to about a third who still turned to TV first.

TV outlets in the country—all of which are operated by government officials, their family, or friends of the ruling party—have essentially “committed a suicide” by failing to broadcast quality

news, said Kounila Keo, a blogger and public policy scholar.

Cambodian TV “has not been able to deliver news besides ‘daily protocol news’ and pure entertainment programs,” Ms. Keo said.

TV viewers only see what state broadcasters air, while online “there are many more people who can broadcast information,” Javier Sola of the Open Institute, one of  
*Continued on page 7*



Drills Highlight Deepest Chinese Military Ties in Years  
Page 6

### AND ALSO

## Minister Gets Given a Hard Time

REUTERS

A prominent Chilean business leader presented the country's economy minister with an inflatable doll on stage at an event late on Tuesday, sparking a social media storm and criticism by Chilean President Michelle Bachelet.

Exporters' association Asexma traditionally gives humorous gifts to VIPs attending its annual dinner, but the life-sized blow-up sex

doll—which was handed to Economy Minister Luis Céspedes with the comment that it could be used to “stimulate the economy”—backfired.

“The fight for respect for women has been an essential principle in my two governments,” Bachelet, Chile's first female leader, said in a post on Twitter. “What occurred at the Asexma dinner cannot be tolerated.”

## Cut...

CONTINUED FROM PAGE 1

border towns last week found the military playing middleman in the illicit trade—and taking a piece of the action in the process.

In Snuol, the motorbikes passing through town are not headed for the border itself. Before reaching the gate, they peel off onto dirt tracks on the left or right, making for backroads and fields where the illegal timber trade with Vietnam occurs just out of sight from the main road. Hardly a half-hour goes by without a few motorbikes sailing down the road with chunks of high-grade timber strapped to their back seats, some the size of an ice chest, others as long as a bed, balanced carefully in the middle like seesaws.

One black-market timber yard sits a half-dozen kilometers from the border, a few hundred meters off the main road along a dirt track that quickly turns from bad to worse. There, in an unmarked field, reporters saw hundreds of logs stacked in messy piles. More than a dozen men milled about waiting to make a sale. With them were some soldiers, part of the Royal Cambodian Armed Forces (RCAF) Border Unit 204.

“We buy the wood and the Vietnamese come, and the Vietnamese take it to Vietnam,” said one of the soldiers, who declined to give his name or rank.

The logging of rare tree species has been against the law since at least 2002, the export of their logs since 1996. The government banned the export of all timber to

Vietnam outright, with the exception of finished products, in January.

“The wood is controlled by the provincial military commanders. The commanders under them sell it for money, and the money they get goes to every provincial level. The journalists get some money too,” the soldier went on. “I don't know why [journalists] get money. I just see the commanders come and give them money.”

The soldier, upset that foreigners had seen the timber yard, quickly stopped talking. Two other soldiers demanded that the reporters stop taking photos and delete any they had taken. They said the reporters were trespassing on military property and then refused to let them drive away, physically restraining one of their motorbike-taxi drivers.

They called their boss, who soon arrived in uniform in a Lexus SUV, a fat diamond-studded ring on his left hand.

Sok, who also declined to give his rank or his full name, said he was in command of the area and threatened to have the reporters arrested. “I can arrest all of you, no matter who you are, because you entered my military base,” he said.

His so-called base was completely unmarked; no wall, no fence, no sign, not so much as a guard post. Sok explained that the base was very new.

But the commander went on to confirm parts of what the other soldier had said.

“The soldiers buy wood from the local people and sell it to the Vietnamese,” he said. “The Vietnamese come to collect the wood from the base and take the wood to

**Correction:** The article “CNRP Urges Patience as NEC Official's Verdict Gets Upheld” (December 15) mistakenly stated that Ny Chakrya was previously the head of rights group Adhoc. He was the group's head of monitoring. The same article incorrectly said that Seang Chet, an opposition commune chief, was facing charges of bribery when he was pardoned earlier this month. He had been convicted of bribery charges.

**Correction:** The article “In Cambodia, Adventure Tourism Finds Its Niche” (December 14) misstated the sponsor for DomRei Angkor's New Year's camping festival. Tuborg beer is sponsoring the event.

### NEWSMAKERS

■ Singer-songwriter STING and his wife TRUDIE STYLER hosted the biennial Rainforest Fund Benefit concert in New York on Wednesday, where BRUCE SPRINGSTEEN and IDINA MENZEL performed for environmental causes. The event celebrated a recent victory for Native Americans and environmentalists in which the federal government ruled against a pipeline project near the Standing Rock Sioux reservation in North Dakota. Native American groups, activists, celebrities and U.S. armed forces had protested against the \$3.8 billion oil project, saying construction would damage sacred lands and any leaks could pollute the water supply. “We haven't won many arguments, those of us who have been in the environmental movement and human rights movement for many years,” Styler said. “I think Standing Rock really was the first gain ...and we have to make sure that we can now build on it.” (Reuters)

Vietnam.”

Sok urged the reporters to have sympathy for the poorly paid soldiers and made a final request. “If brother wants gas money, I can pay,” he said, using a common local euphemism for a small bribe. “But do not write about the wood

gion. It warned that replacement species such as Thnong were headed the same way.

Conservation groups blame the selective and often illegal poaching of such trees for helping open up protected areas to more widespread logging in Cambodia, which

*“The wood is controlled by the provincial military commanders. The commanders under them sell it for money, and the money they get goes to every provincial level. The journalists get some money too.”*

—SOLDIER,  
ROYAL CAMBODIAN ARMED FORCES BORDER UNIT 204

brother saw on the military base.” The base was not the only timber yard in the area doing illegal business with Vietnam.

Vuth Tha, a young man with a heavy piece of luxury-grade Thnong timber strapped to the back of his motorbike, had stopped last week on the side of the main road with about a half-dozen companions similarly loaded, taking a quick break before their final sprint.

He said they were headed for a nearby timber yard just behind the Heng Heng Casino—one of two within sight of Tumpeang Sre, the border gate at the end of the road—a few hundred meters from Vietnam.

“People come from Vietnam to buy the wood and they take it back [to Vietnam],” he said.

Prized for its deep red grain, Thnong is one of the rarest and most expensive tree species in Cambodia, worth tens of thousands of dollars per cubic meter in China, where much of the timber that Vietnam imports ends up. In a 2014 report, “Routes of Extinction,” the U.K.'s Environmental Investigation Agency said timber poachers feeding China's furniture market had brought the most prized local species of all, Kra Nhung, or Siamese Rosewood, to the edge of extinction across the Mekong re-

has experienced one of the highest rates of forest loss in the world over the past decade and a half.

Mr. Tha said he'd spent three days digging a Thnong tree stump out of the ground on his nearby farm to get his log. One of his companions said he bought his Thnong log for \$25 from “someone in a forest” in Mondolkiri province, about an hour's drive to the east, and was hoping to sell it behind the casino to a Vietnamese buyer for \$50. He said his profit would be minus the \$2.50 he paid to bribe police at a checkpoint to get here.

On the road back to Snuol town from the military base, Sok, the commander, pointed out a walled-off compound and said it was the timber depot of a local oknha, the royal title bestowed on wealthy businessmen who donate at least \$100,000 to the state. Oknha Leak, he said, built the depot only a few months ago and was using it to move high-grade wood from Mondolkiri and Ratanakkiri provinces. “Then he transports the wood to Vietnam,” Sok said. “But I don't know what checkpoints he uses.”

Local and national officials declined to discuss the timber trafficking along the border or largely denied it was happening.

Deputy district governor Sam Nal said he knew that “some soldiers” in  
*Continued on page 8*

# Cut...

CONTINUED FROM PAGE 2

the area had been buying and selling logs in the past, but thought they had quit since the provincial governor ordered a crackdown on the timber trade early this year. He said he would tell the district governor about the base by the border and let him decide whether to investigate.

As for the steady stream of timber flowing through his district in broad daylight, Mr. Nal downplayed the scale of the problem.

"I've seen small vehicles carrying wood on the road sometimes, but we're not sure if it's going to Vietnam because we never follow them," he said. "We never see them taking luxury wood because Kratie has no luxury wood."

Meas Sopheap, the commander of the military's 204 Border Unit, hung up on a reporter when asked about his unit's role in the timber trade with Vietnam. The head of the province's military headquarters, Brigadier General Nay Toeung Loeng, said he had no idea that soldiers were trading timber.

"I think this information is not true because the economic police and military police are working to stop forest crime everywhere and they will crack down on any soldiers in the timber business," he said before hanging up.

Brigadier General San Bunthan, the province's military police commander, said he knew nothing about it and also hung up. Brigadier General Eng Hy, the voice of the government's latest crackdown on timber trafficking as spokesman for the National Military Police, said he did not believe what the reporters had seen, either.

"I don't think they are transporting and trading timber as openly as you say," he said. "I will send our forces to the base in Snuol and



Enric Catala

A billboard in the center of Snuol town in Kratie province warns passersby of the theoretical consequences of illegal logging.

take action if we see any wood."

Since the crackdown started, the task force says it has seized more than 70,000 cubic meters of unlicensed wood, finding most of it inside the plantations and sawmills of wealthy businessmen. It has sent dozens of cases to provincial courts across the east, but after several months, not one of them has been charged, fueling speculation among conservation groups that the crackdown was meant more to settle individual turf wars than actually apply the law. The task force has not netted a single soldier, police officer or government official, and the seized timber has since been sold off to other wealthy businessmen.

In the past, the government has brushed off reports of soldiers and military police caught trafficking timber as the work of a few bad apples.

But the military's history in the country's timber trade is long and deep, and no group has done more to expose it than Global Witness, an NGO based in the U.K. that investigates the abuse of natural resources around the world.

"It is sadly not surprising that Cambodian soldiers continue to be involved in the illegal logging trade, as they have been for many years," said Alice Harrison, a spokeswoman for the group, which has helped chronicle Cambodia's timber racket for more than a decade.

"The tragedy is that little appears to have changed, and Cambodia now has one of the world's highest rates of deforestation."

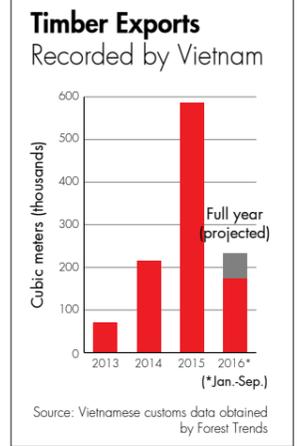
Last year, Global Witness released "Taking a Cut," a damning report—hard copies were promptly seized by the government—detailing a network of state institu-

tions and top security officials greasing a thriving illegal logging trade in the Phnom Oral Wildlife Sanctuary in western Cambodia. It named a number of military units and ranking officers whose soldiers were seen logging illegally or moving illegally logged timber out of the area, and said the military police—under the command of Gen. Sokha, the head of the new task force—provided them protection down the supply chain.

In 2007, the NGO published "Cambodia's Family Tree," another report—also seized by the government—accusing several senior officials and their kin of operating a vast illegal logging syndicate. It called the army's Brigade 70 a "nationwide timber trafficking service" moving ill-gotten logs across the country. In last year's "The Cost of Luxury," Global Witness accused a Brigade 70 major general of working hand-in-hand with oknha and timber magnate Try Pheap to loot protected forests in the country's northeast.

"The anti-logging task force has had almost a full year to stop the illegal logging trade with Vietnam," Ms. Harrison said this week. "Last month's figures showing that the trade is still booming, plus the lack of convictions by the task force, expose it as yet another attempt by the Cambodian authorities to appear to be doing the right thing while destroying the country's forests for their own benefit."

Those figures come from Vietnam's own customs authorities, and they say the scene in Snuol is being played out along much of



Enric Catala

A man drives a stack of high-grade timber through Snuol town toward the border with Vietnam last week.

the border.

The figures, obtained and shared by the U.S. advocacy group Forest Trends, suggests that Cambodia's timber export ban has made for less of a wall than a sieve, slowing down the traffic but hardly wiping it out. They show that 175,000 cubic meters of logs and—mostly—sawn wood worth a combined \$122 million made it into Vietnam between January and September.

At this rate, Cambodia's timber exports this year to Vietnam are set to top its exports in 2014. The exports briefly ballooned last year to nearly 590,000 cubic meters thanks to recent logging and trade restrictions in Burma, Laos and Thailand, making Cambodia Vietnam's No. 1 timber supplier by value for the first time in recent years.

In an interview with Channel News Asia a few months ago, Environment Minister Say Sam Al called the figures "groundless" and "falsified."

In an email this week, Forest Trends program manager Naomi Basik said the figures came straight from the Vietnamese government.

"We have every reason to believe that these data are accurate and that the system by which they are collected and shared are sound," she said.

Ms. Basik added that the gap between Vietnam's timber import figures and Cambodia's export figures as reported to the U.N. in recent years were "very large—too large to be attributed to simple fluctuations in exchange rates, differences in customs classifications or conversion factors" including, for example, switching measurements from weight to volume.

Vietnam's customs figures also show that the exports still include sizable volumes of high-grade timber, and that most of the wood is crossing at official border gates, including Tumpeang Sre in Snuol.

Almost as ubiquitous as the motorbikes passing through the district and stacked with timber are the vans, packed to the hilt with logs jutting out their backs, invariably hollowed out of all but the front seats to get the most out of every load and caked in dirt from their forays into the forest.

One afternoon last week, reporters watched a three-piece convoy head west from Snuol into Tbong Khmum province, where it passed Memot town and turned down a dirt road toward the Daun Roath border gate. There, on a side track of the tiny border town, a stone's throw from the gate, they unloaded in front of a few homes before starting the trip back.

A villager said the timber-laden trucks that used to rumble through to the border gate have vanished



Enric Catala

Top: Motorbike drivers haul pieces of wood along the main road between Snuol town in Kratie province and the Vietnamese border last week. Bottom: A van packed with logs parks before unloading near the Daun Roath border gate in Tbong Khmum province last week. Local villagers sell the logs to Vietnamese buyers across the border.

since the export ban was imposed in January. She said the packed vans, like this afternoon's, show up less now but still make regular deliveries.

"The wood goes across the border" to Vietnam, said the woman, who declined to give her name for fear of running afoul of local authorities. The drivers, she said, "sell the wood to the local people because the locals have customers from Vietnam.... They call the Vietnamese and they negotiate the price. A piece of Kra Nhung can cost \$10,000."

As in Snuol, local officials were in denial.

The deputy director of the province's economic crimes bureau, Phorn Sokpoeu, denied that vans were still moving high-grade timber to local border gates.

"We have never seen vehicles transporting luxury wood to the border because we have received strict orders from the provincial governor to stop the export of timber to Vietnam," he said.

Mr. Sokpoeu said he had heard that some villagers along the border were still moving some luxury timber into Vietnam, but had no idea where they were doing it.

"We will stop and arrest them if we see them crossing the border,"

he said. Sambath, who plies the national highway between Kratie and Tbong Khmum in his share taxi almost daily, and also asked that his full name not be used for fear of authorities, said the packed vans were a regular sight.

"They transport timber every day," he said. "In the day and in the night."

Police manning the checkpoints in Snuol last week made no effort to block them.

"They stop them, but they stop them to take money from the drivers," Sambath said. "After they pay, they let them go."

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# NITA BHALLA

SOUTH ASIA CHIEF  
CORRESPONDENT

Thomson Reuters Foundation

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Title of Entry  
**Blood Mica**

Nita Bhalla is the Chief Correspondent in South Asia for the Thomson Reuters Foundation and is an award winning journalist for her coverage on human rights.

Based in New Delhi, she covers disasters, conflicts, development, women's rights, climate change, human trafficking and slavery. She is a former Reuters political and general news correspondent and has worked in India, eastern and southern Africa and the Indian Ocean region.

Nita started her career in 1999 with the BBC World Service based in Ethiopia. From armed conflicts to killer floods, national elections to global warming, she has reported on a wide range of subjects from some of the world's most challenging environments during her almost two-decade career as a foreign correspondent.

She has a Bachelor's degree in Applied Chemistry and a post graduate degree in Broadcast Journalism from Cardiff University.

# Blood Mica

Deaths of child workers in India's mica "ghost" mines covered up to keep industry alive

Reporting: Nita Bhalla, Rina Chandran, Anuradha Nagaraj  
Editing: Belinda Goldsmith  
Multimedia: Tristan Martin, Judite Ferreira  
Photography: Vivek Muthuramalingam, Nita Bhalla  
3 August 2016

In the depths of India's illegal mica mines, where children as young as five work alongside adults, lurks a dark, hidden secret - the cover-up of child deaths with seven killed in the past two months, a Thomson Reuters Foundation investigation has revealed.

Investigations over three months in the major mica producing states of Bihar, Jharkhand, Rajasthan and Andhra Pradesh found child labour rife, with small hands ideal to pick and sort the valued mineral that puts the sparkle in cosmetics and car paint.



Mica is used to create the shimmer seen in many cosmetics

But interviews with workers and local communities discovered children were not only risking their health by working in abandoned "ghost" mines off official radars, but they were dying in the unregulated, crumbling mines, with seven killed since June.

In the mud-and-brick village of Chandwara in Bihar in eastern India, a father's grief laid bare the ugly reality of the illegal mining that accounts for an estimated 70 percent of India's mica output.

Vasdev Rai Pratap's 16-year-old son Madan was killed in a mica mine along with two other adult workers in the neighbouring state of Jharkhand on June 23.



Vasdev Rai Pratap, father of 16-year-old Madan, who died in a mine

"I didn't know how dangerous the work in the mines is. Had I known, I would never have let him go," said Pratap, sitting on a charpoy - a traditional woven bed - outside his home, surrounded by friends and family who had come to mourn the teen's death.

"They said it took almost a day to dig out his body after the mine collapsed. They cremated him without telling me. I didn't even see my boy before they set him alight."

Pratap, like other victims' families and mine operators, has not reported the death, choosing to accept a payment for his loss rather than risk ending the illegal mining on protected forest land that brings income to some of India's poorest areas.

The farmer said he was promised a 100,000 rupee (\$1,500) payment from the operator of the mine but has yet to receive it.

The mine where Madan was working is illegal, and no one was available to comment on the teenager's death.

Indian law forbids children below the age of 18 working in mines and other hazardous industries but many families living in extreme poverty rely on children to boost household income.

The Thomson Reuters Foundation findings were backed up by Nobel laureate Kailash Satyarthi's child protection group Bachpan Bachao Andolan (BBA) - or Save the Childhood Movement - which documented over 20 mica-related deaths in June - including that of Madan and two other children - double the monthly average.

BBA discovered four children were killed in July.

India is one of the world's largest producers of the silver-coloured, crystalline mineral that has gained prominence in recent years as an environmentally-friendly material, used by major global brands in the car and building sector, electronics and make-up.

A spokesman for India's Ministry of Mines said safety in mica mines was a matter for state governments who are facing mounting pressure from the mining industry to grant licences to illegal mines.

Social activists also support these calls, claiming it will help crackdown on the flourishing black market in mica, worker exploitation and abuse and child deaths.

"The central government has no machinery to inspect or control the mines," the spokesman Y.S. Kataria told the Thomson Reuters Foundation.

BBA workers, who have been trying to stop child labour in Jharkhand's mica mines for almost a decade, said Madan's death and the six others in the past two months were just the tip of the iceberg, estimating fewer than 10 percent of mica mine deaths are reported to the police.

"Although there are no official figures on child deaths in the mines as it is all illegal, we hear about them through our networks in the villages where we work," said Raj Bhushan, BBA's Jharkhand Project Coordinator.

"Normally, we hear about 10 fatalities on average in a month. But in June, we documented over 20 deaths, including two of boys aged around 15 years old."

Officials from India's Directorate of Mines Safety were not available to comment on the number of child fatalities.

The National Commission for the Protection of Child Rights (NCPCR), a government organisation, conducted a fact-finding mission in Jharkhand's Koderma and Giridih districts in June and found children as young as eight years old mining mica.

"We didn't get any reports of children being injured or dying due to mine accidents such as collapses as it is all illegal and not reported openly. But it may be happening," said the head of the fact finding mission of NCPCR, Priyank Kanoongo.

A senior official from Jharkhand's labour department, which is responsible for ensuring child labour laws are followed, also said there were no reports of children dying due to mica mining.

"Firstly it is a violation of the law of the land if people are mining without any approval and if they are engaging child labour, they committing a double crime," said Principal Secretary of Jharkhand's labour department S.K.G. Rahate.





Their sisters sifted and separated the mica on the surface, squatting on their haunches and using their bare fingers. Older girls also separated the mica and took it to a collection point.



Children sorting Mica in Jharkand

"Mine owners say the children aren't working inside the mines, they're outside. That they're just earning a little extra for the family," said Rana Sengupta, chief executive of the non-profit Mine Labour Protection Campaign in Jodhpur, Rajasthan.

"But the children have no business being anywhere near the mines, inside or outside. Even adult mine workers aren't safe."

At a mine in Bhilwara's Tiloli village, two young girls sat on a mound of dirt, sorting mica pieces by the side of a mine partly filled with rain water.



Pooja, 9, sorting mica outside a mine in Bhilwara

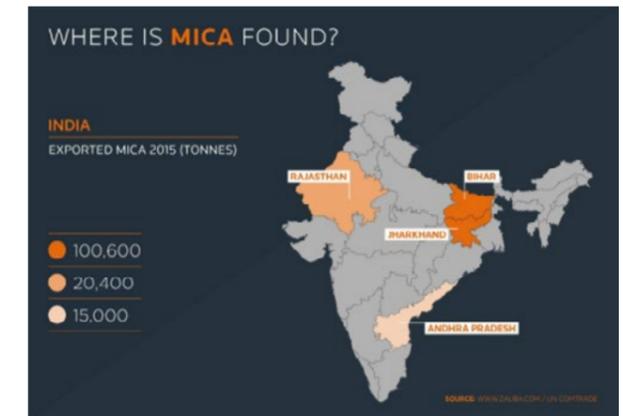
"I don't go into the mine. It's too deep, I get scared," said Pooja, who looked about seven years old. "I sort bigger pieces from smaller pieces. It's not so hard."

Dhanraj Sharma, a commissioner in Rajasthan's Labour Ministry, said he was not aware of child workers in the mines in Bhilwara or "anywhere else in the state".

"Their parents are working in the mines, and the children stay with them. They may be playing there,

they may be doing some small things for the parents. That doesn't mean they are working," he told the Thomson Reuters Foundation.

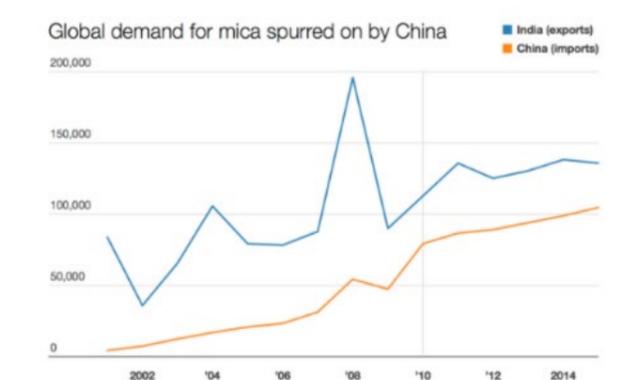
The recent surge in demand for mica has revived a flagging industry in India that dates back to the late 19th century when the British discovered mica in a belt spanning Jharkhand's Koderma, Giridih and Hazaribag and Bihar's Nawada, Jamui, Gaya and Bhagalpur districts.



Once boasting over 700 mines with over 20,000 workers, the industry was hit by 1980 legislation to limit deforestation and the discovery of substitutes for natural mica, forcing most mines to close due to cost and stringent environmental rules.

In 2013/14 India only had 38 reporting mica mines, according to India's Bureau of Mines.

But renewed interest in mica from China's economic boom and a global craze for "natural" cosmetics has sent illegal operators scurrying to access the hundreds of closed mines in India and created a lucrative black market.



A chart showing a 15-year rise in Chinese imports of mica, with Indian mica exports following a similar trend

District officials admit child labour is a problem in some mines but say it is restricted to remote pockets where government services and welfare schemes have failed to reach the poor with training in new industries and schooling.

"There are some portions where mica mining is going on and where children are involved, and we're trying to roll out schemes to support families to generate other income such as training in goat breeding, masonry and making pickles," said Uma Shankar Singh, District Collector for Giridih.

Dutch campaign group SOMO estimates up to 20,000 children are involved in mica mining in Jharkhand and Bihar.

Investigations by the Thomson Reuters Foundation over three months found children working in and around mica mines in northern Jharkhand, southern Bihar and in Rajasthan in India's northwest.

In vast open-pits in Jharkhand, children as young as six squatted among glittering rocks scouring with their bare hands for shiny, brittle mica flakes, while older ones descended rickety ladders into shafts seeking better quality silicate.

In Giridih's Tisri area, Basanti sifted through the reddish earth searching for pieces of mica while her 10-year-old son Sandeep climbed into a rat-hole dug in the side of the hill and descended 3 metres (10 ft) to pound on the wall with a pick-axe.

His mother said the skinny boy in checked shorts and a white T-shirt has been working in the mines since he was seven and, with his contribution, the family earns 300 rupees (\$4) daily.

"I know it's dangerous but that's the only work there is," she said, squatting on the ground, a metal dish partially filled with mica beside her.

"I know Sandeep doesn't want to do it but it is what it is. If he was able to go to school and learn and become something then that's good, but first we need to eat."



Sandeep, 10, climbs out of a Mica mine in Jharkhand

In Bhilwara district in Rajasthan, boys as young as five were seen climbing down narrow, crumbling shafts to cut mica with a hammer and chisel, working for up to eight hours a day.

Figures from India's Bureau of Mines show the country produced 19,000 tonnes of mica in 2013/14.

But the same data shows exports were 128,000 tonnes, with more than half, or 62 percent, going to China followed by Japan, the United States, the Netherlands and France.

Despite numerous emails and phone calls, no one could be reached at the Bureau of Mines to comment on the discrepancy in the numbers.

Leading Indian colour and effect pigment maker Sudarshan said experts estimate about 70 percent of mica production in India is from illegal mining in forests and abandoned mines.

This mica is sold to various traders, processors and exporters with deals conducted on mobile phones leaving no paper trail as it leaves India for manufacturers overseas.

"We sell the mica to an agent in town, who sells to a big buyer from Kolkata, who exports to China, the United States, Germany and Brazil," said mine operator Dhara Singh, who said he and his brother owned a half dozen unmarked mines in Bhilwara.

When asked about the two young girls sorting mica at the site in Bhilwara's Tiloli village, he said they were volunteers.

But within minutes, four men arrived on two motor-bikes, forcing all visitors from the site.

The abuse of workers and threats of violence and intimidation tainting the industry have added to the mounting demand within the industry for the government to intervene to ensure all mines are operated legally while also helping impoverished communities find new sources of income.

"The stock is there, the demand is there but the government is not granting licences," said one Giridih-based businessman, who exports mica to China, Germany and Britain.

"Exporters continue to work, buying the mica from here and there. But there is a general sense of insecurity that the government could crack down any time. It is better they grant the licences and take the royalty."

While the industry is economically unfeasible for some countries due to the need for manual labour, it remains a key earner in India where labour costs are low - particularly when child workers are used.

Child rights campaigners say authorities have overlooked these child labourers for years but hope drawing attention to child deaths in the mica mines may highlight the dangers and force governments to act.

Occupational hazards include head injuries, cuts and abrasions, skin and respiratory infections like silicosis, tuberculosis and asthma - but the risks from mining in poorly maintained, unregulated mines were also proving lethal.



Children collecting scrap mica from a mine in Jharkhand

BBA's Bhushan said he and his workers met with most of the families of those who died in mining accidents in June, and found their only means of survival was this unlicensed mining.

"All were poor households who are dependent on mica mining for an income," Bhushan told the Thomson Reuters Foundation.

"They fully understand these places are death traps, but they also realise they have little choice but to go back there the next day. It is essential that authorities address this issue before more children die."

In a huge open quarry inside the dense forests of Domchanch in Koderma district in Jharkhand, Sushila Devi diligently pounds at glinting grey rocks with a hammer, breaking away chunks of mica and tossing them into a large plastic basin.

The 40-year-old mother of six has been collecting mica every day for over a decade, yet she - like most other workers - has no idea what it is or its price on the global market.



"We don't know what mica is, where it goes and what it is used for. All I know is that if I work hard and collect it, I will get some money," she said, adding that she gathers around 10 kg of the mica daily which earns her 80 rupees (\$1).

"We take it to a nearby mica dump and the dealer buys it for 8 rupees per kilo. I don't know how much he sells it on for. He would never tell us. Why would he risk losing more profit?"

The mark-up is huge, say activists. Mica is bought from miners at a maximum of 25 rupees (40 cents) a kilogram, yet top quality sheet or "ruby" mica sells for up to \$2,000 a kilogram, according to USGS data, helping boost demand for synthetic mica.

British cosmetics company Lush, which prides itself on its handmade products and ethical trading, stopped using natural mica in 2014 due to concerns about child labour.

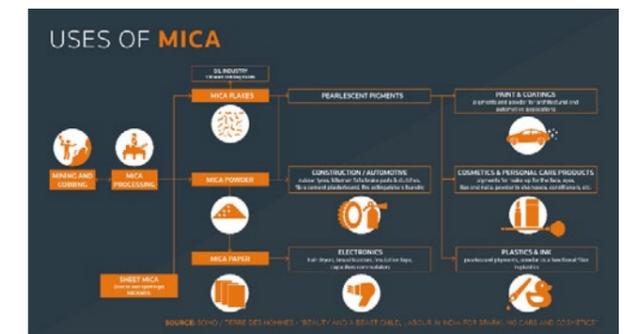


Lush's head of ethical trading Simon Constantine said he knew something was amiss when armed guards were needed to accompany auditors to one Indian mine supplying their mica.

But the retailer, which has stores in almost 50 countries, then discovered this year that the synthetic mica it was using instead also had traces of natural mica. The company said it is tackling that.

"Mica took us a bit off guard as it was a new material that we had not really used before," Constantine told the Thomson Reuters Foundation in an interview in Lush's head office in the English south coast town of Poole.

"But buying is an imperfect system that doesn't end ... it's always more of an improvement than a finished product."



Up to 10 percent of mica globally is used in cosmetics.

Estee Lauder Cos Inc is another cosmetics company using mica in its products but said it only sourced 10 percent of its mica from India and was working with BBA to tackle child labour, helping fund schools in villages in mica areas.

"We strongly believe that education is a cornerstone in this effort, helping young people stay in school and providing the skills that will allow them to later on get work outside the mica industry," Estee Lauder said in an email statement.

“While this programme has yet to end child labour in mica mines, it shows that responsible business practices and sustained collaboration can create better prospects for children living in the mica-mining region.”



L’Oreal said more than 60 percent of its natural mica came from the United States while the rest came from other countries including India.

“In India, mica mainly originates from socially and economically challenged regions where there is a risk of child labor, unsafe working conditions, and where the supply chain involves multiple actors,” the company said on its website.

L’Oréal said it was important all players worked together and a summit in February in Delhi on responsible mica sourcing, organised by French non-profit organisation the Natural Resources Stewardship Circle (NRSC), was a good first step.

NRSC’s Executive Director Catherine Peyreaud said child abuse in mica had been going on for years but it was only when revelations about mica being used in cosmetics hit global headlines two years ago that action started to combat the problem.

She said NRSC was now completing a five-year plan with concrete steps to tackle child labour and improve living conditions in mica areas so children did not return to mining.

In Koderma’s Dhab, one of about 45 villages where BBA is working, Pooja, 13, proudly shows off the run-down school she has attended for almost two years since she left mica mining.

Dressed in her school uniform - a pristine white short-sleeved shirt and a navy skirt - the bare-footed girl excitedly points at a row of locked blue doors of the one-storey white-washed building.

“I like going to school. I have friends here and I get to play and also get to study and learn things. I am happy that BBA came and helped our parents to understand that making children work is not good,” said Pooja, adding that she would like to be a teacher when she grows up.

“The mining was dangerous. When we were down there, we were always looking up thinking the earth and rocks might fall on us. It happened to me once, but I managed to get out as my friend Munni helped me. I got badly hurt that time.”

Pooja is one of the lucky ones and many more companies sourcing mica from India are now making efforts to stop children from working in the mines and provide alternatives.

German drugmaker Merck KGaA discovered children were collecting mica at mines used for its supplies in 2008 so cut some of its suppliers and now only sources from Jharkhand and child-free legal mines.

The company said in a website statement that it had also set up mica sources in the United States and Brazil and was producing some effect pigments based on synthetic mica.



Another major buyer, Chinese pigment manufacturer Fujian Kuncai Material Technology Co Ltd, said its audits had found no evidence of child labour in its supply chain although acknowledged that it was a complex challenge.

A Fujian Kuncai spokesman said the company was setting up its own firm in India to buy directly from - and audit - mines.

It was also joining forces with child rights group Terre des Hommes and helping to fund a programme to save 10,000 children from child labour in Koderma and Giridih districts of Jharkhand.

“Alone one cannot make the difference and we are looking forward to work together reaching our shared ambition: no child labour in the mica supply chain,” the spokesman said.

With companies needing mica willing to fund community initiatives, campaigners believe legalising the industry could undermine the black market in mica and help improve health and safety standards as well as combating child labour.

However environmental campaigners would not welcome the reopening of these mines. Many mines are now on protected forest land and would not get approval to operate legally.

Sengupta from the Mine Labour Protection Campaign in Rajasthan said a first step to combat child labour would be to mandate that all mines have an operator to report to the state to ensure workers’ safety and earnings and no child workers.

“In many instances, children are being forced to work because their parents aren’t getting paid properly or because the father has fallen ill and has no health care,” he said.

“If operators are in place at every mine, we would go a long way in checking child labour.”

Some legal mines have managed to tackle child labour.

The Sri Venkata Kanakadurga and Uma Maheshwari mica mines in Talupur in Andhra Pradesh are among the oldest and biggest licenced mines in the area but mine supervisor Syed Ismail said children don’t work in the mines anymore.



The Sri Venkata Kanakadurga mica mine in Andhra Pradesh



Mica mine supervisor Syed Ismael

“In these parts, mica has always been traditional work that entire families have engaged in. My father worked in a mine and we would visit,” said Ismail who has been in and out of mines since the age of five.

“Over the years access to schools has made sure children are no longer in the mines. Now children here say M is for Mica.”

While campaigners hope that a renewed push to clean up the mica industry will help generations of children, it is too late for Pratap who has lost his youngest son, Madan.

The last time he saw Madan was in April when the teen left the village in search of a life beyond farming and cattle, filled with dreams of returning home as a businessman.

“He told me he was going to do something with his life and I was happy for him so I let him go,” said Pratap. “How could I know the work he was doing was going to kill him?”

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# CHENG HAN WEN

JOURNALIST

The Reporter 報導者

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Title of Entry

**Taiwan's offshore fisheries:  
Fraud, exploitation, bloods and  
tears of fishing ground**  
台灣遠洋漁業專題：造假·  
剝削·血淚漁場



Cheng Han Wen is a journalist at The Reporter based in Taipei. In 2015, she joined The Reporter to cover health, waste management and ocean issues. Before joining The Reporter, she worked as a journalist at United Daily News in 2014. She loves to explore new forms of storytelling, especially with infographics. She was the recipient of the 2016 Excellent Journalism Award in Investigative Reporting in Taiwan.

## 【台灣現場 | 造假篇】 濫捕、洗魚、造假——觀察員眼中的真相

文 李雪莉 共同採訪 / 鄭涵文、蔣宜婷 圖片提供 / 離職觀察員2016/12/19



過去10年，台灣實施了遠洋漁業觀察員制度，隨船監督捕撈與運搬。這個重要且立意良善的制度，原來出現重大漏洞。過去數個月間，《報導者》追蹤了一群離職觀察員，不少觀察員先是遲疑，「（內幕）這麼黑，你們真的敢寫嗎？」在記者一路了解與說服，並歷經數個月的訪談，不少離職觀察員以及遠洋漁業現場工作者，願意以化名現身。

他們提供過往的經歷、手邊的公文、報告與紀錄，揭露出遠洋漁業的真相：從漁獲數字、船長身份都能造假。從這群觀察員眼裡，目睹台灣監理的嚴重疏漏。這個漏洞不只讓台灣被國際制裁、衝擊台灣經濟，也帶來海洋生態的浩劫。

2015年9月，靠近秘魯的太平洋上，一艘掛著萬那度國旗但台灣經營的小釣船在轉運鮪魚時，發生了一件離奇的失蹤案。美國籍漁業觀察員戴維斯(Keith Granger Davis)，在漁獲卸載完準備簽名放行前，意外落海。41歲的戴維斯是觀察員中知名的環保倡議者，有16年豐富的觀察經驗，他落海那天，無風無浪。

戴維斯的失蹤，是因擋人財路還是意外落海，迄今真相未明。美國《哈芬頓郵報》(Huffington Post)還以「漁業的黑暗面」報導他的案件。

遠洋漁業的黑暗面，在於它鮮為人知的叢林文化。

### 逐利：遠洋漁業的赤裸驅力

在台灣，也有一批遠洋漁業觀察員，隨著遠洋漁船出航，日夜觀測與記錄業者的捕撈，是政府派駐在遠洋的眼睛。他們的報告最後會一層層回報到相關政府部門，再匯整到國際漁業組織。這份第一手報是國際組織對海洋資源評估的重要依據，也是各國每年捕撈配額的分配基準。

人口佔全球0.36%的台灣，卻擁有全世界最多、超過1,500艘的遠洋漁船。這個驚人的漁業王國，在別人眼裡卻是「大尾鱸鰻」。國際組織要求台灣落實觀察員制度，於是2005年，台灣正式推動遠洋漁業觀察員制度，目前有54位。

觀察員的工作環境並不好，每趟觀察長達4到5個月，一年出航1到2回。過去，他們被要求每天要海上觀測12小時（2014年改為8小時），若搭的是小釣船，就住在只有60公分寬、棺材般狹小的臥鋪，經常被臭蟲叮咬，巨浪滾進船艙時，得穿著雨衣睡覺。船邊偶遇鯊魚環繞。

但大自然的惡劣，比不上人性的貪婪。因貪而起的風險，常讓觀察員更接近死亡。

在海上，一艘遠洋漁船造價動輒數億，加上滿載的漁獲利益，經常成為海盜與歹徒的目標。有的船長

非法配有槍械，也有船務公司提供武裝保全的服務，保全在斯里蘭卡上岸，每位每天600美元，3人一組，配有1支輕機關槍和2支AK47衝鋒槍。擔任漁業觀察員7年的林木添（化名）清楚記得一次上船，船長就配給他一把左輪和兩盒子彈，讓他把玩和防身用。

高風險、高利潤，遠洋漁業不是人人玩得起。漁撈情況最好時，一艘圍網船一年可以進帳3億元。一位退役觀察員說：「海上是24小時不會停止操作，你（船東）睡覺時，有大量漁工在幫你賺錢，那是比做毒品更好的生意，是會上癮的，就像飛龍在天。」



退役觀察員說：「海上是24小時不會停止操作，你（船東）睡覺時，有大量漁工在幫你賺錢，那是比做毒品更好的生意，是會上癮的，就像飛龍在天。」（圖片提供 / 離職觀察員）

一出航便長達2到3年遠離人類社會，與天與海搏鬥，很難維持優雅和文明。無邊際的網、竄逃的魚、強力的鈎、無情的浪，還有甲板上的血色與魚腥，惡劣環境，讓出海久的人，作風也可能變樣。海上的使命是戰勝自然和魚群，船長與漁撈長的目標是「滿載而歸」。

家族兩代出了5位大型圍網船漁撈長的葉明志，捕了一輩子的魚，他說：「賺少不行，輸人家，人家一年抓1萬噸，你抓5千噸，可以看嗎？……你抓沒有，還要保育？連飯吃都沒有！你抓不好就換人，換人啊……換別的漁撈長。」

拼量的工作倫理主導遠洋漁業的文化。如果有漁工不小心讓上網的魚逃走，船上的麥克風會放送連聲國罵，幹部一激動，就可能隨手用漱口鋼杯往漁工的頭砸去。甚至，上過船的人常說：「一條大目鮪和一位漁工同時落海，記得去救那條魚。」一隻百公斤的大目鮪價格好幾萬元，菜鳥外籍漁工的月薪才約一萬。

### 臥底：汪洋中最孤獨的存在

充滿風險的觀察員工作，起薪4萬6，出海加給後，可達6、7萬，但流動率很高。但真正讓他們恐懼、擔憂的，不是體力上的挑戰，而是他們往往是一群不受歡迎的存在。

台灣觀察員主要由「對外漁業合作發展協會」（對外漁協）負責招募和訓練，再由漁業署以約聘僱方式，簽訂一年一聘的契約。官方定位他們是「科學漁業觀察員」，上船主要工作有兩種，一是科學資料的蒐集與記錄，包括在特定洋區捕撈上的魚種與數量、隨著魚群意外混獲上來的海龜或鯨鯊、魚類的生物採樣等；另一個重要工作是監測漁船，包括船名的標示、船位定位等系統的正常運作、船長與船上人員是否遵守捕魚及轉載規定等。

在船上，他們是一群沒有執法權，卻擔負監督工作的觀察者，孤身一人面對與自己利害衝突的船長、語言不通的外籍漁工，也難怪被視為如影隨行的「抓耙仔」。



觀察員是一群沒有執法權卻擔負監督工作的觀察者。（圖片提供 / 離職觀察員）

被視做臥底者的風險，來自目睹海上龐大的非法漁撈利益。

40多歲的陳文中（化名）一開始，便參與建立台灣的觀察員制度。他受僱於對外漁協，但實際上，工作6年多，都在漁業署前鎮辦公室工作，是觀察員與官方間的橋樑，負責派觀察員上船和回岸。

陳文中向《報導者》透露他和船上觀察員的互動細節：「每週一，觀察員都要傳真船位和觀察內容給我，我們有暗號和代碼，會知道他們是不是出了問題。通衛星電話時，我要他們別說話，只要回覆我『對或不對』。」

若船上發生違法的事，陳文中總會跟觀察員說「你就當做沒看到，先回去睡覺」。他表示：「沒辦法，我要保護觀察員的安全。因為一落海，船隻只

要停在那個經緯度停3天、72小時，最後寫個海事報告，船就可以開走，就結案了。我不希望觀察員被推落死掉。」

我看到的其他觀察員都作假，為了生存妥協、配合船長……船長只要找一個不怕死的漁工「處理」我們就好。（3年觀察員資歷，已離職）

離職觀察員們表示，負責招募和訓練的對外漁協，會要他們上船前，先到船東或船長那送茶葉、拜碼頭。在觀察員行為準則裡，漁協總耳提面命，上船要以「和睦、融洽為前提」、「需有安全第一的絕對概念」。

而熟悉觀察員制度的官員指出，「這制度人命關天啊。船上其他人都聽船長的，觀察員非我族類啊，船長會認為你是來監視我們的。如果科學觀察員都做不了，執法觀察員更難，可能被海拋！」

在漁業署訂定的行政命令裡，漁船得接受觀察員登船觀察，一旦拒絕會被裁罰。但一位在漁業署工作的資深員工透露，原本觀察員應隨機抽樣、登船，達到真正中立的觀察，但運作上，仍得拜託船公司配合，才能上船；而且從沒有任何船東因拒絕觀察員，被政府開罰過。

少了公權力的強力後援，觀察員成了海上最尷尬而孤獨的存在。而靜靜凝視與觀察的他們，又見證了哪些漁業的不法利益與荒謬失序？

## 潛規則：視而不見的洗魚與濫捕

西非象牙海岸南方，600噸的台灣漁船正在附近的大西洋海域航行，出海兩個月，漁獲量出乎意料豐厚。這晚月光照路，忙了一天的漁工開始晚餐，這餐吃的不再是冷凍食品，船長下令把捕上的鯊魚製成魚翅火鍋，佐著豐盛酒水。

「有這麼好康？」搭上這艘船的觀察員王增辛（化名）嗅出不尋常。熱鬧間船長對他敬了酒，強烈暗示著：「今晚別再觀察，早點去睡了吧！」王增辛識時務地折回船艙，躺進狹窄的臥鋪，決定暫時把良心鎖上。但他無法入眠，因為沒多久，他便感覺船外的動靜，船隻慢慢逼近，船側的碰墊撞擊摩擦，同時響起機器起網的嘎嘎聲和漁工雨鞋的踩踏聲。

憶起那一夜，王增辛說：「我知道他們又在『洗魚』了！」

海上的「洗魚」和陸地上的「洗錢」概念相似，指的是這批魚由誰、在何地、用何種方式捕撈，無從得知。在海撈的世界裡，受監管的漁船才有漁撈權，有產地證明的漁獲才能進港販售，每一道程序都要白紙黑字，向台灣政府或沿岸國提出申請。但

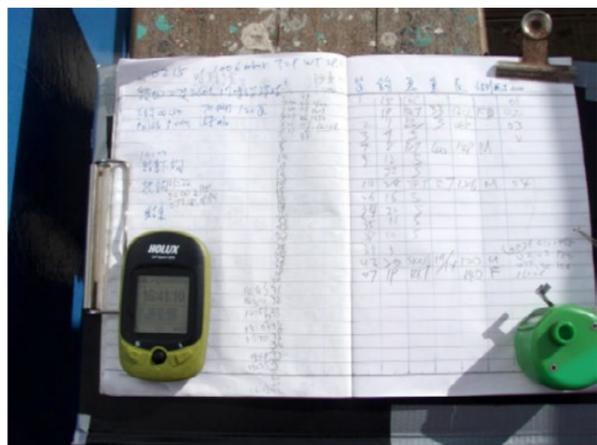
眼前這批未報備的漁獲即將「洗」去另一艘船，出售獲利，並進到消費者的肚子裡。

洗魚的現象，代表著龐大的漁撈黑數。這些在檯面下的不法漁撈行為，正是海洋資源枯竭、生態瀕危的主要因素。

為了確切掌握漁撈的實況，隨船的觀察員得填寫船隻在洋區內的位置、捕魚方式、漁撈數量，記錄各類魚種以及保育類鯨鯊等，完成漁撈日誌。

但問題就出在漁撈日誌的真實性。

看著台灣漁船公然違法、船長對官方觀察員毫不忌憚，王增辛雖挫折但不意外。他在上船觀測第2年就遇到船隻違法洗魚。問他為何不勸阻或回報，他搖頭嘆氣說：「我們回報的資料不是被（漁業署）竄改，就是被鎖起來。」



為了確切掌握漁撈的實況，隨船的觀察員填寫船隻在洋區內的位置、捕魚方式、漁撈數量，記錄各類魚種以及保育類鯨鯊等。（圖片提供／離職觀察員）

例如，超過捕撈配額後船隻是否不再撈捕？撈上來的若不是該船隻的目標魚種，是否按規定拋回海中並填表回報？撈上的保育類魚種是否妥善處理？

多位觀察員告訴《報導者》，船長很少拋棄「過撈」或「誤撈」上來的漁獲。觀察員林木添說：「一條90公斤的大目鮪大概就是一台摩托車的價格，怎麼捨得丟掉？」

少數漁船將過撈漁獲非法轉載至其他船上，船隻數量多的船東則會調度船隊彼此載貨；也有轉載中國船上的漁獲到台灣船上，當做自己捕撈的漁獲。這些被視為違規的行為，在茫茫大海裡，太多方法可以規避。

這兩、三年是洗魚高峰期，尤其在大西洋的南非開普敦那裡，違規的漁船和運搬船不少。（漁業署工作多年員工，仍在職。）

觀察員們告訴《報導者》，由於觀察員沒有執法身份，船長敢於一意孤行。常見的做法是船長安排船

隻會船，相會時，關掉漁船定位器，讓漁業署暫時偵測不到，或謊報定位器故障。非法轉載速度快，一個網撈上來是兩、三噸，1小時內就搬得完。

事實上，有時連人在岸上的船東，都無法掌握船長的海上行為。一位轉任潛水員的前任觀察員王惠育（化名）指出，「每個船長有自己的私密帳冊（私房錢）。他們回報船東的是一套，回報漁業署又是一套。我就遇過船長釣到單價高的馬加鯊，釣了5條，只回報船東1條，其他4條就透過會船，這邊交魚，那一邊用竹竿把裝著錢的牛皮紙袋遞過來。」

除了過撈，遠洋漁船常見的違法，還包括對混獲上來的海龜或保育類鯨鯊的非法處置。

2012年，台灣為了響應全球對鯊魚的保育，率先推出「鰭身不分離」政策，要求鯊魚「鰭」與「身」的重量比例不得大於5%，而且在2013年7月正式開罰，一旦鰭身分離，會收回或撤銷漁業執照。但多數卸任觀察員說，此政策難以落實，因為部份船長或漁撈長的保育觀念不足，加上鯊魚鰭的價值遠高於鯊魚肉，魚肉太佔空間，船員通常割鰭棄身，留下魚翅。

王惠育曾在中西太平洋執行過鯊魚保育計劃，根據他的經驗，魚艙最上頭擺著幾條鰭身不分離的鯊魚，進港後，由岸上檢查員照張相後便收工走人，但大家沒注意到艙裡藏了許多被割下的鯊魚鰭。在海上岸上都無法監管惡意捕撈，讓熱愛海洋的王惠育說：「我上去兩年，覺得很失望，覺得沒什麼正義感，就決定離開了。」

另一位目前在港口工作的前任觀察員說，「他們（船長）本來很多在做假資料的，我們一上來，做假就有困難嘛，這完全違背他的生存之道。所以我上船時會直白地告訴船長，『你想做任何事都ok，但也要讓我做事，至少讓我拍照、取樣，演完戲大家各自卸妝。』」

海洋巡防總局第五海巡隊分隊長曹宏維告訴《報導者》，目前海巡署與漁業署每年共同執行3次「遠洋漁業巡護」，他們透過巡護船登檢，查察違規。但就像是警察抓違規攤販，曹宏維說，你追他跑，陸上都不一定能抓到，海上現行犯更難抓，再加上蒐證難，進到法院成案的例子更少。他認為：「漁船上應該要派觀察員一艘一艘監督，否則是大海撈針。」

船長對我態度非常冷漠，並限制（我）若非傳送漁獲報告外，不得登上駕駛台，不得使用電話，每週僅准許用傳真機一次……本航次混獲偽虎鯨一尾，船長竟完全無視我在場，當場宰殺，只為拔取偽虎鯨牙齒。我跟船長溝通困難故只得拍照紀錄，無力勸阻……（7年半觀察員資歷，已離職）

其實歐盟早在2012年開始，就連續3年追蹤台灣，他們發現台灣並未盡到打擊非法漁撈的責任。於是在2015年10月對台祭出黃牌警告，要求加強監管，其中一項是落實觀察員監理。

為了強化監管機制，立法院在今年(2016)年中修正通過《遠洋漁業三法》，加大規範與罰責。眾多監管機制之中，也增加了觀察員的比例，目標在未來半年內從原有的54位增為130位，涵蓋率要達到漁船數的5%以上。

現制已運作10年以上，但卸任觀察員以幾乎控訴的方式，向《報導者》揭開遠洋亂象。未來漁業署將每年約要花上1億3,000萬元，擴大觀察員計劃，同時新增「強化國際合作打擊非法漁業」，5年23億元的監管計劃。但，監管不力的漁業署，能進一步落實管理嗎？

## 破口：無力的事後監管

事實上，台灣不缺法、不缺制度，只是欠缺監管的決心。除了上述漁獲數字偷天換日，連登船工作者的身份，造假情況也很嚴重。

依漁業署《漁船船員管理規則》，遠洋漁船上的船長職務必須由台灣人擔任，且輪機長、船副等幹部的外國籍比例，不得超過二分之一。但現況並沒依法令在走。

實務的運作是這樣：漁船從前鎮開出，由持有船長等幹部船員執業證書的人上船，經過海關檢驗出港後，船開至小琉球或新加坡，船長、輪機長被「放港」，再由中國、韓國等其他國籍者上船更換。業界稱這個做法為「頂票」，一個人頭的行情約5千元。

頂票是整個漁業界都在操作的事。一位在前鎮擁有多艘鮪延繩釣船的船東告訴我們，光是他近10艘船的船長中，只有兩位是台灣人。

面對人才聘僱未依法規走，漁業署副署長黃鴻燕的回覆是：「法令規定船長一定要是台灣人，目的是希望要傳承，希望台灣漁業至少還是台灣人在指揮。外面有傳說（找外國人）……，有可能，但這個被查到是要被處分。」

但離職觀察員說，即便他們目睹冒名頂替的幹部名單，並主動回報，漁業署也很少查明。

除了觀察員制度，漁業署其實握有不少監理工具杜絕違法，卻無法落實。

以漁業署投資高額經費設立的漁船定位系統(VMS, Vessel Monitoring System)為例，每一天，漁業署的台北與前鎮兩個辦公室，有超過10位替代役男及

數位全職員工，透過該系統來監控台灣一千多艘出海漁船的船位，確保漁船不在禁漁區、未違規進入他國經濟海域捕撈、沒有違法會船等等行為。

台灣漁船每4到6小時，要回報衛星定位訊號給對外漁協，但弔詭的是，漁業署未選擇即時監控，而是隔天才監看漁協提供的船位報表，追蹤可疑船跡。



漁業署投資高額經費設立的漁船定位系統 (VMS, Vessel Monitoring System)。(攝影/吳逸驊)

副署長黃鴻燕說：「船位定位系統的訊號是即時的，同仁要看，隨時看得到，還可以看到過去幾天的船跡，發出警告。」

但知情人士告知，漁業署並非即時監管，多半是「監控前一天漁船位置」。他說，漁業署不像警政與海巡體系有24小時的輪值人員，即時監看需要經費，緊急與船長通話的衛星電話，一分鐘得花費上百元。他也指出，歐盟對台發出黃牌後，曾派專人赴台，當歐盟得知監看實情時，曾質疑監管的緩慢，而要求立即改善。

那麼發現船隻異常作業，漁業署怎麼處理？

遠洋漁業管理科助理楊克誠表示，一旦他們發現疑似違規的船隻，會先以平信發函給船東，請船東要求船長駛離該水域；船東必須在文到3日內至漁業署說明，若未執行，漁業署會再發雙掛號信催促。

但從《報導者》拿到的一份公文顯示，漁業署的監管顯得拖延：

◎9月13日：一艘小釣船違規進入菲律賓海域作業

◎9月20日：發函要求該漁船離開；9月23日該船仍在原海域作業

◎9月23日：漁業署以電話通知家屬，要求船隻立即駛離。

從發現到要求船長駛離，這中間已過了整整10天。即便基層監管人員再努力監督，冗長的簽核流程已讓監管失利。

我們是一群沒有辦法執法的海上觀察員，我們看到一堆不該看的。幾乎每個人都看過洗魚。（10年觀察員資歷，已離職）

深入漁業署，會發現兩種截然不同的氛圍。《報導者》採訪漁業署前鎮辦公室當天，替代役和承辦人員已向疑似違規的6艘船主，發出6封雙掛號信。前鎮的公務員負責監管小型鮪釣船，小釣往東南到索羅門、向西到非洲，他們每天的工作就是盯著螢幕，從800多艘小釣船的船位軌跡，查詢疑點。基層人員即便發現違規船隻，常因漫長的公文旅行，等同在發函警告一項「已完成的違規行為」。

一位小琉球的陳姓船長告訴我們，現在的利潤很低了，加滿油的船開出去就要拼命抓魚，所以他出海時不會理會官方警告，即使回航收到漁業署寄來的雙掛號，他的作法是，「通通撕掉」。

漁業署祭出公權力，業者不太買單。不少船東很會虛與委蛇，交待了事，不但政府難以懲罰，更改變不了非法捕撈的傷害。

此外，基層人員辛苦簽核公文，特別是懲處的公文，也經常被擋下。

目前違反《漁業法》最高罰鍰是30萬元，或透過行政命令連續罰鍰。但任一個處分要成案，從承辦人、組長、科長、單位主管、法規科主任，再送到主秘、副署長、署長，整個流程走完至少要蓋10個章。

一位資深員工說：「私下大夥兒都在抱怨，上頭會以各種理由要求我們重簽，但簽4次被退4次，無疾而終的例子不少」、「每一關都可能把案子擋下來，因為船主和業者會透過立委，直接向官員關說」。

遠洋漁業管理科的楊克誠從替代役退役後進入漁業署，在他身上，看到基層公務員有心執行。我們問他，是否相信上頭的長官會核准他簽上去的處份？他思索幾秒後回覆：「嗯，我相信我們署長！」

## 困局：保護漁權還是守望海洋？

受訪的離職或現任觀察員，多數充滿熱情，他們認為如果落實監管，像是善加利用觀察員的第一手紀錄，能真實了解各洋區的魚群生態，也能提供政府政策制訂的線索。

於是我們回頭詢問漁業署副署長黃鴻燕，觀察員的資料是否準確？他斬釘截鐵指出，漁業署絕對不會叫觀察員做假。他說，觀察員是船上唯一中立的角色，資料一定比船長公正，只是不排除有時候有些人為的因素（如沒經驗或與船長掛勾），如果做

假，會被撤職。至於觀察員一旦看到違法事件，黃鴻燕說，漁業署會進一步徹查漁船上的異常。

然而，根據長期參與觀察員制度的前員工陳文中（化名）說，漁業署很少進一步調查漁船上的造假，甚至會協助「修正」資料。

陳文中指出，若是漁撈量、海龜海鳥數量過多，署裡會針對明顯高於其他國家的釣獲率，請對外漁協幫忙「修正」、「整理」後，再提供一份全新的數字給國外組織。他說：「為了不讓國際組織看到台灣漁業的黑暗面，數字通常會這麼表現：捕撈的漁獲與年度配額配得剛剛好，撈上的保育類動物則會少報。」陳文中說，選擇離開漁業署是他知道太多祕密了。

我曾在太平洋赤道上下5度的大目鮪魚區，一天看到他們抓超過50隻的欖蠟龜，就是電影《海底總動員》裡的那種。我回報後，署裡不理不睬，上頭的管理者還跟我說：「你這樣我們很難做，你把海龜資料報給我，我也不敢拿到國際上，會被罵死。」所以我開始學乖，到觀察員的後幾年，不管船上抓到多少保育類欖蠟龜，我填寫的數量就是1隻。（7年觀察員資歷，已離職）

有觀察員等各式監理工具，卻執行不力，漁業署是有苦難言或掩耳盜鈴？

專訪漁業署時，《報導者》最常感受到的是，官方和業界都瀰漫一股被國際不公平打壓的義憤，以及保護台灣漁權、不容國際配額被砍的愛國心。

在漁業署一路看著遠洋漁業成長的黃鴻燕說，現在一旦台灣船違規被舉發就是連坐法，所有船隻受懲罰。他拉高些聲量說：「小船大船都是台灣漁船啊……漁業署這個管理的位子很難做，因為台灣船太多了，這個位子當然辛苦啊！」

黃鴻燕認為：「（台灣）不守規矩，祖產給人沒收走了，將來就不能再作業，你要從這點來看……我今天在我這個位置，如果讓它（漁船）亂搞搞到最後，祖產給人家沒收了，誰要負責任？」

維護「祖產」的至高共識，以及不少漁民尚未跟上的能力和觀念，多少造就低報或錯報的文化，也成為官方與業者漠視保育的託辭。

從漁業署預算的分配情況，可以看出台灣始終以「發展」優於「永續」的心態領導漁業。2016年，漁業署近51億元的預算中，漁船用油補貼佔去一半，達25億，遠高過相關的監理、保育計劃的額度。

走向全球的漁業大國，卻有個資源不相稱的管理預算。2016年，漁業署總預算佔農委會1,200億預算裡的4.1%。

資源不足的結果，漁業署經常得搭著業者便車才能見到歐盟執委，國際漁業糾紛也得由船公司的駐外單位協助。這種左手要和業者「搏感情」，右手要和業者「開罰單」，讓漁業署的角色充滿矛盾。

面對無法積極行動的沉痾，專長國際漁業談判的國立海洋大學教授黃向文說，政府的想法經常是60分及格就好，但現在國際標準嚴苛，對一個最大的公海漁業國來說，若只能被動回應，會很辛苦。

## 台灣準備好了嗎？

2017年1月20日《遠洋漁業條例》將上路，未來的重大違規會處以150萬到4,500萬元罰鍰，相較過去罰款額度3~30萬元，天差地別，此外還有數百條新增的條文與嚴格規範即將實施。漁業署也因應歐盟壓力，2016年開始推動「強化國際合作打擊非法漁業」，但計畫目標仍充滿形式主義的痕跡，包括：觀察員海上觀測任務60船次、掌握漁船卸魚聲明4000筆……等。漁業署說已積極宣導，並強調未來一定加強執法。

但台灣始終不是沒有法令。與中西太平洋島國觀察員的執行力相比，差異在執行的決心。

台灣最大的民間造船廠—中信造船，旗下船隊長年在密克羅尼西亞等島國經濟海域捕魚。中信漁業部專員黃程智比較兩邊觀察員後說：「他們（島國）權力很大，他們寫的東西是真的到下一個港口就能扣船的東西，你（台灣）寫了是給自己看而已，誰會去執行？違法，然後怎樣？你會重罰嗎？罰2萬？罰10萬？這些錢船東怎麼會有感？」

而中西太平洋島國吉里巴斯的觀察員南陶卡納(Tamaria Nantokana)接受《報導者》採訪時說：「政府對我們的支持是讓我們做各種紀錄，特別是能得到罰鍰的那種。」

翻開漁業署的法定預算書，每年因《漁業法》收到的罰鍰約在1千到2千萬元之間；但在太平洋島國，不論是錯誤的漁撈日誌、過期漁業證照，船長和漁船都可能被長期扣留，而捕撈一隻鯨魚開罰的金額甚至達100萬美金。而這樣的重罰，不論島國是出於生態保育或罰金利益，都讓業者上緊發條，加強訓練漁工，避免以身試法。

永續漁撈是未來趨勢。從觀察員的眼中看到的漁業真相，殘酷赤裸，他們對官方一再坐視遠洋上頻繁發生的洗魚、違規、造假的文化，感到憤怒。

面對即將上路的新法，台灣能否擺脫過時的漁撈文化、整頓充滿造假與虛應的監理，漁業署能否擺脫與企業密不可分的共生關係……，這將影響台灣遠洋漁業的存續以及在世界舞台上的公信力。



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# MINJUNG KIM

HEAD OF VISUALS, ASIA

The Wall Street Journal

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Title of Entry

## Five Major Risks to Flying in Asia



MinJung Kim as Head of Visuals, Asia, leads a team of dedicated visual journalists at The Wall Street Journal's Asian headquarters in Hong Kong. In recent years she and her team have produced engaging interactives on North Korea missile launches, Kowloon Walled City, Alibaba and Malaysia's 1MDB scandal, to name a few. MinJung, a graduate of Missouri School of Journalism, found passion for information graphics at school and has expanded her skills working at reputable news organizations like The Seattle Times, The Hartford Courant and The Wall Street Journal throughout her career. In her free time, MinJung enjoys reading arts and design books, finds peace while swimming or practicing Pilates and aerial yoga and loves to learn new things.

# Five Major Risks to Flying in Asia

Asia is the world's fastest-growing aviation market. But experts worry the continent is ill-equipped to handle the increasing traffic. Here are the major risks, illustrated through the course of a fictional flight.

By Daniel Stacey

Published July 13, 2015

Updated Aug. 4, 2015

## 1. Trouble on the Runways

Animals and people are wandering onto runways across Asia—especially in India and Indonesia where planes are taking off in places that, until recently, were rural. Although rarely deadly in recent years, the incursions are a big concern because they force pilots to make high-risk decisions after striking cows, antelopes or even men on motorbikes.



A senior Indonesian transport official explains why some people ignore warnings to keep off runways.

In 2014, SpiceJet Flight SG-622 struck a buffalo on a runway in western India. The animal lodged in the engine cowling, forcing the pilot to abort takeoff at the last moment.

A year earlier, a Lion Air jet struck two cows on a runway on the Indonesian island of Sulawesi. The “smell of burning meat entered the cabin” and two passengers were injured after the plane slid off the runway, according to an Indonesian investigation.

And in 2012, Batavia Air Flight Y6-206 was nearing 300 kilometers an hour when the flight crew heard a bang during takeoff from Pontianak, Indonesia. The jet made it to Jakarta, but when it landed, it suffered large vibrations, veering left to right before stopping. Air traffic control in Pontianak found a deer's head beside the tarmac.

Authorities have tried to police runways better. In Pontianak, they paid landholders to improve animal holding pens and strengthened airport fences.

But villagers sometimes break through fences to access better grazing land or take shortcuts near runways, officials say.

In 2010, a training flight hit two locals riding beside the runway on a motorbike in Budiarto, Indonesia, killing the two and the flight instructor. A later investigation found villagers had cut holes in the fence to cross the runway to a main road.

### Photos: Dangerous Intruders

Damage caused by human and animal incursions

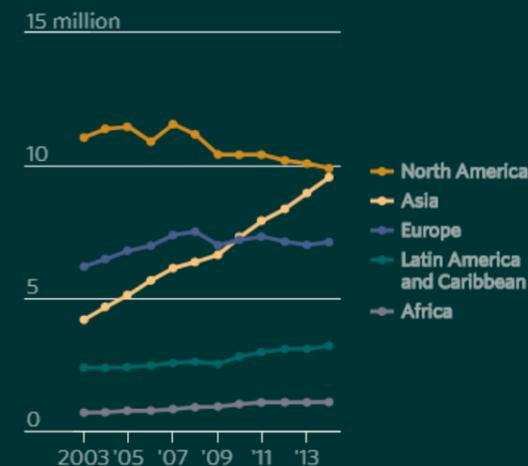


In 2008, a Merpati Nusantara Airlines plane was damaged by a collision with a cow in Merauke, Indonesia. NATIONAL TRANSPORTATION SAFETY COMMITTEE, INDONESIA

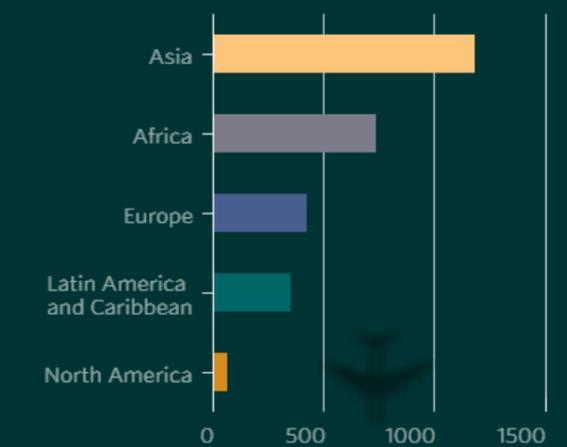
### Pushed to the Edge

Asia's increasing air traffic and a relatively high fatality rate fuel worries that its infrastructure is inadequate.

#### Total departures by region



#### Fatalities for 2008-13



Note: North America excludes Mexico.

Source: International Civil Aviation Organization

## 2. Bad Storms Rising

Every part of the world has big storms. But aviation experts say Asia is less prepared.

Many of its airports lack wind-shear detection devices or advanced weather radar. They also have a history of more communication breakdowns, airline experts say.

Communication issues were highlighted in the 2014 crash of AirAsia Flight 8501, which fell into the sea during a tropical storm between Indonesia and Singapore, killing 162.



An aviation expert explains why some Asian airports don't have the necessary equipment to deal with dangerous storms.

It later emerged that ground staff didn't do a face-to-face briefing with pilots, as is common with many carriers to help prepare crews on how to deal with storms. A spokeswoman for AirAsia said the airline has since switched to face-to-face briefings.

Indonesian authorities, who are continuing to investigate, have also upgraded their national meteorological website to better track whether airlines are checking conditions.

Ground staff who guide pilots through bad weather must rely on vastly different tools across Asia, from infrared wind-shear detection systems in wealthier countries to simple paper printouts delivered in six-hour intervals in poorer places.

Wind shear, which can involve sudden, dangerous changes in wind direction during a plane's final approach or takeoff, is a particular concern. Most major U.S. airports have had wind-shear detection devices in place since the 1990s. Many Asian countries like Indonesia and India lack them.

In Indonesia, 10 airports are slated to receive new wind-shear detection systems over the next five years. India's Ministry of Civil Aviation also announced upgrades to meteorological equipment last year, though it didn't include wind-shear devices.

## 3. Disorder in the Skies

Many Asian countries lack "air traffic flow management" systems like the ones used in North America and Europe to track planes automatically, suggest aircraft spacing and adjust flights around storms. Only Japan, Australia, and New Zealand have the most-sophisticated versions in the Asia-Pacific region.

Elsewhere in Asia, traffic controllers often rely on information radioed in from pilots and other airports. They enter the information into computers to help calculate aircraft spacing. That takes time and traffic controllers can become overloaded, especially when congestion is bad or staffing isn't sufficient.

## Global State of Air-Traffic-Control Technology

Some countries use air-traffic-flow-management systems to oversee their busy skies... others don't.



- Level 1: Air-traffic-flow-management computer system fully deployed
- Level 2: Limited air-traffic-flow-management computer system in place
- Level 3: No air-traffic-flow-management computer system, but other simpler procedures in place to compensate
- Level 4: No air-traffic-flow-management system or procedures

Note: Some dependent territories are colored the same as their controlling countries despite not sharing airspaces.  
Source: Metron Aviation

In 2012, an Indonesian controller reported feeling "overloaded" on the day when a Russian Sukhoi passenger jet crashed into a volcano outside Jakarta during a test flight, killing all 45 onboard. The controller's supervisor and assistant didn't show up that day, an official investigation found. The controller approved a request by the pilots to descend into a prohibited area before the plane crashed.

In 2010, an Airblue jet crashed while circling Islamabad's airport, killing 152. The pilots made errors while air traffic and radar controllers struggled to manage congestion, investigators found. The airport didn't have advanced air traffic flow management software and has yet to upgrade.

Many countries including Singapore, Malaysia, Thailand, China and Indonesia are working to modernize their air traffic management systems. But connecting these systems across Asia presents a further challenge.

In the U.S. and Europe, states and nations cooperate to ensure their traffic systems speak to each other. In Asia, acting in concert is less common. Countries are at different stages of development, and political relations are often strained.

China, Indonesia, Singapore and other nations agreed last December to run a trial of a system that connects information from navigation centers in different countries.

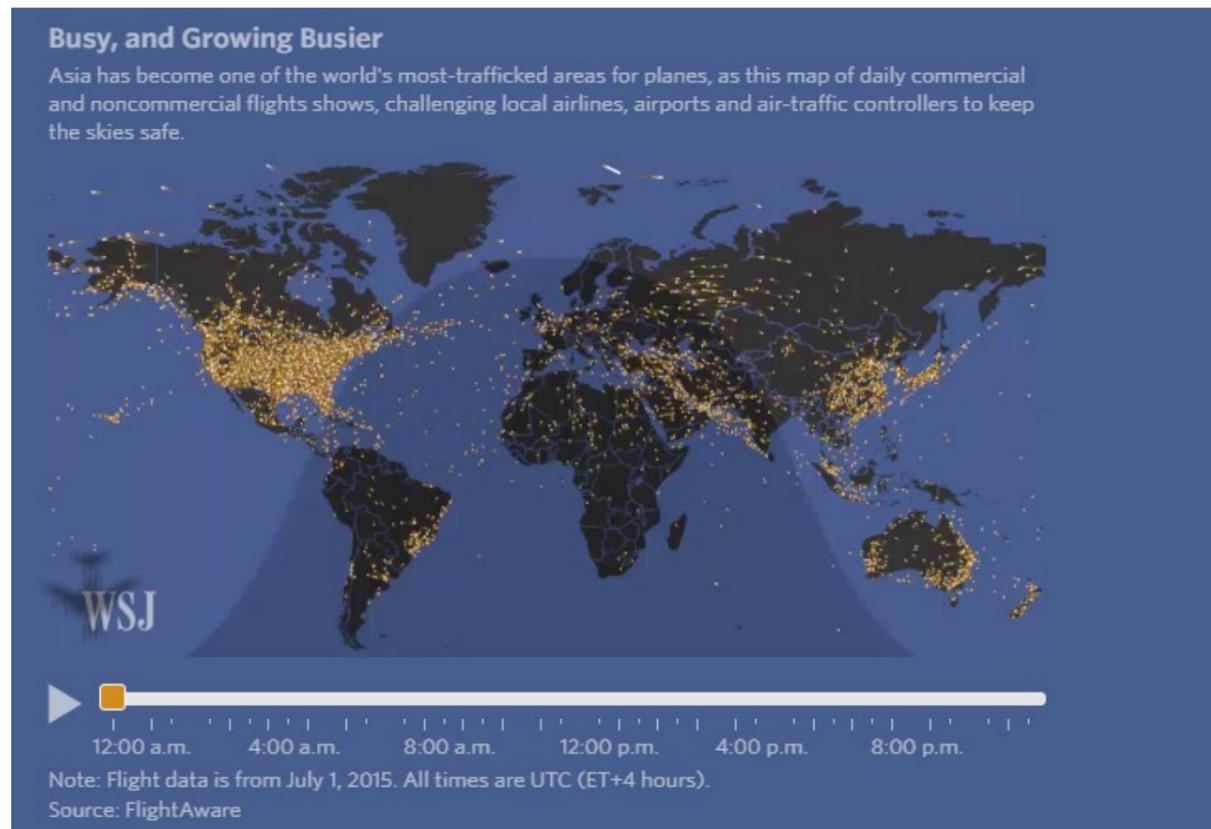
But the plan comes with opt-out clauses that allow participants to retain control over their airspaces or withhold details that could better inform other countries about congestion. It isn't slated for full implementation until 2018.



An air-traffic-flow-management expert describes how the system can take pressure off of Asia's busy controllers.

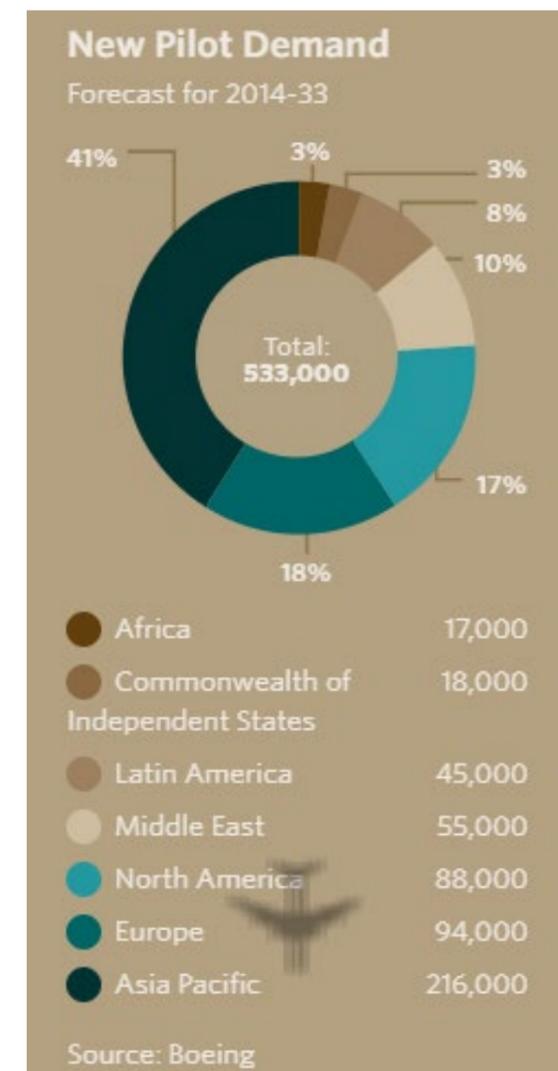


The director of a flight school that trains Asian pilots explains why pilot shortages in Asia could create additional risks for fliers.



## 4. Who's Flying the Plane?

The captain of Bhoja Airlines Flight 213 in Pakistan had just received warning of a violent storm ahead in 2012 when he broke into prayer, singing "let there be peace in my life also," according to translations of a cockpit recording.



The plane dropped 1,000 feet in four seconds. The captain pulled the nose up, putting the plane into a stall. It crashed short of the runway, killing all 127 on board.

Investigators found both the captain and co-pilot didn't have appropriate training for their particular aircraft. The pilot had never practiced landing with dangerous shifting winds. The co-pilot had virtually no experience with modern automated aircraft. Bhoja Airlines is no longer in operation.

As demand for pilots grows in Asia, experts worry carriers are rushing some untested staff up the chain of command. Boeing predicts Asia Pacific will need 216,000 new pilots in the next 20 years, compared to 88,000 in North America and 94,000 in Europe.

Poorer countries and less-profitable carriers find it especially hard to keep talent. A pilot is paid as little as \$20,000 in Myanmar, compared to about \$120,000 in other parts of Asia, making it easy to poach good aviators. Myanmar's national regulator has stopped handing out operator certificates to new airlines, worried that safety mechanisms cannot keep up.

In 2013, a Lao Airlines ATR-72 crashed into the Mekong River, killing 49, after the pilot entered the wrong altitude and then appeared to suffer from disorientation, according to an official investigation.

Pilot training also became an issue in the February 2015 crash of TransAsia Airways Flight 235, which fell into a river near Taipei, killing 43. Flight data released by Taiwan's aviation authority showed pilots closed down the wrong engine after a component failure.

The investigation into that crash is ongoing. Taiwan's Civil Aeronautics Administration ordered 71 of TransAsia's pilots to undergo proficiency tests carried out by third-party professionals, which they all passed, according to the airline. The airline said in a statement it is expanding training and taking other steps to enhance safety.

## 5. Deadly Arrivals



*An analyst from the CAPA Centre for Aviation explains why investing in new terminals isn't always enough.*

China has spent big sums to upgrade airport facilities. But other nations including India, Indonesia, and the Philippines haven't invested what's needed to keep up with demand, especially in second-tier cities.

Some runways, adapted from old military air fields, are too short or are badly designed for good drainage. Some airports lack modern landing navigation systems or proper runway lights.

Even cities with new terminal buildings may not be well-prepared, experts say. New terminals feature shinier passenger handling facilities or shops. But aviation experts say funds would be better spent on more basic safety equipment.

In 2010, Air India Express Flight 812 from Dubai to Mangalore lost control after landing past the usual touch-down point. The captain saw a concrete structure filled with navigation aids at the end of an overshoot area and shouted, "Awww! Big one!" according to cockpit voice recorders. The plane slammed into the structure, igniting a fire that killed 158. Eight survived.

Mangalore's runway had a safety strip 90 meters long. Although that is within ICAO guidelines, the FAA requires U.S. airports to have arrestor beds 300 meters long at the end of landing strips, and materials like lightweight blocks to help slow aircraft. Mangalore's runway also had a steep drop-off at the end. The concrete structure housing navigation aids should have been buried, investigators said.



The airport's director told The Wall Street Journal the safety area has since been leveled out, and the concrete structure replaced with objects that break apart upon impact.

In 2013, a Cebu Pacific plane veered off the runway at Davao in the Philippines when the pilot mistook lights on the edge of the runway for center lights. Such center lights are common at major airports, but the airport didn't have them. No one was injured.

An official from the Philippines Civil Aviation Authority said the Davao airport hasn't installed center lights because of the airport's relatively narrow runway, and that the accident was caused by pilot error. The authority also said it is taking steps to improve navigation at the airport.

Correction: The SpiceJet plane that struck a buffalo in India in 2014 was Flight SG-622. An earlier version of this article incorrectly identified it as Flight B738.

**Produced by:** Marc Lajoie  
**Visual Design:** Rosa de Acosta  
**Video:** Warangkana Chomchuen and Diana Jou  
**Reporting and Research:** Daniel Stacey  
**Executive Producers:** MinJung Kim and Patrick Barta  
**Reference:** <http://graphics.wsj.com/asia-aviation/>

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# PREETIKA RANA

ASIA CORPORATE REPORTER

The Wall Street Journal

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Title of Entry

## IKEA's India Bet Runs Into Thicket of Rules



Preetika Rana is a reporter at The Wall Street Journal's Asian headquarters in Hong Kong; she has a keen eye for healthcare trends in the region. Preetika previously covered South Asia for the Journal from New Delhi, where her business coverage focused on how India's billion-plus-people are shaking up the world's biggest consumer-goods companies, restaurateurs and retailers. Her other coverage in South Asia has included the 2015 Nepal earthquake, the 2013 Rana Plaza collapse in Bangladesh—one of the world's worst industrial disasters—and a brutal gang-rape in 2012 that paved way for new sexual-assault laws in India.

## GENERAL NEWS

# IKEA's India Bet Runs Into Thicket of Rules

Law requiring foreign retailers to acquire products locally slows expansion; red tape, few labor laws

By Preetika Rana

Updated Feb. 23, 2016 5:34 p.m. ET



BHADOHI, India—Swedish retailer IKEA wants to sell its flat-pack dining tables, cotton dish towels and Scandinavian-sounding sofas to India's blossoming middle class. Under Indian law, roughly one-third of those items must be made locally, and that is proving a formidable obstacle.

IKEA has scoured the country for new products that meet its standards and come up nearly empty-handed. Laminated table tops from Indian suppliers contained unsafe levels of formaldehyde and steel dinner plates leached chemicals into food, company scouts found.

When IKEA helped set up a carpet factory seven years ago in the northeastern district of Bhadohi, it found most rugs from the area were knotted at home—often with the help of children—and women weren't permitted to work outside. Workers had to be taught how to use a bank account, in addition to taking workshops on carpet weaving. Last year, only 3% of IKEA's global inventory came from India.

For global companies banking on India to pick up the slack left by a slowing Chinese economy, IKEA's struggle is a sobering reminder of the limitations of that idea. Foreign manufacturers have long complained about red tape and poor quality. Now retailers, including Wal-Mart Stores Inc., and French hypermarket chain Carrefour SA, who had once bet on an emerging new class of wealthy Indians, have dropped their plans to open supermarkets in the country.

"It hasn't been easy," said Sandeep Sanan, IKEA's new business head tasked with ramping up production in India. "Change is a slow and painful process—and cannot happen overnight."

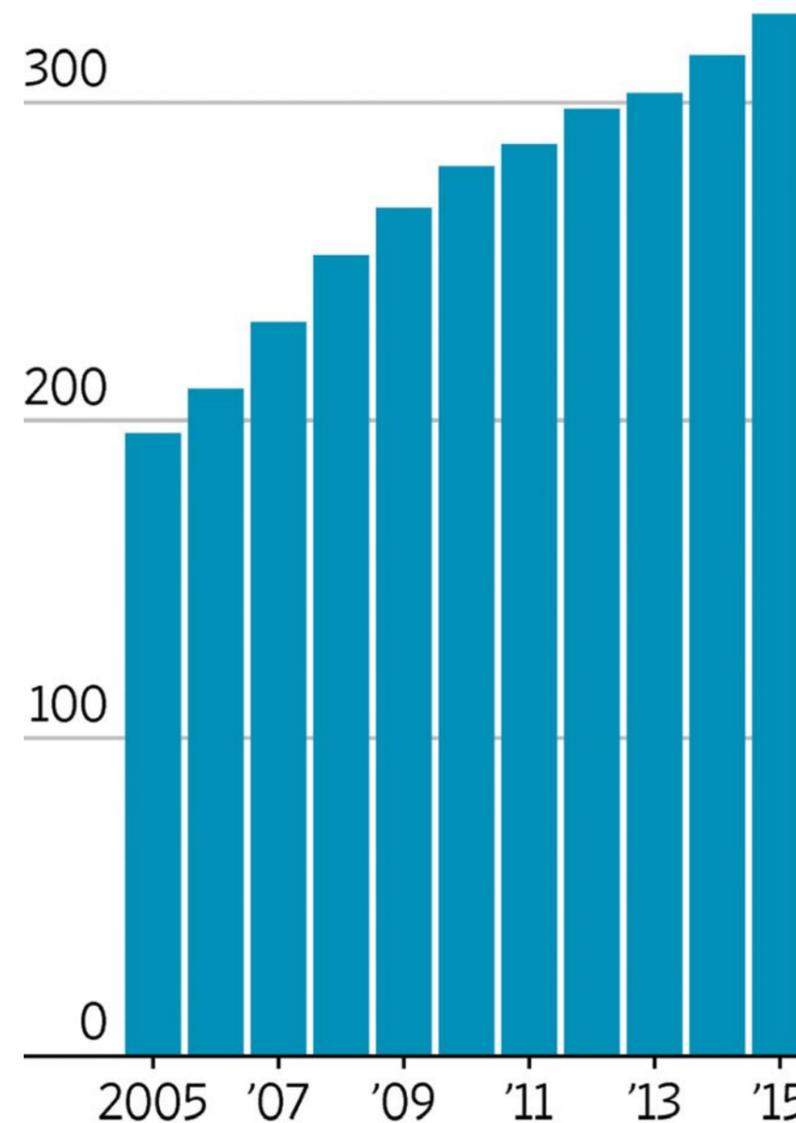
## Previous efforts

IKEA had previously fought, and lost, a battle to do business here. In 2007 it arrived and set up a retail team in hope the government would relax its norms and let it run its own stores, rather than open them with a local partner. The lobbying didn't go as planned and IKEA had to fold its tents.

In 2012, when the government finally signed off on full foreign ownership of retail outlets, it added a requirement that at least 30% of the value of its inventory must be manufactured in India, and said that target had to be reached within five years—in some cases, before setting up shop.

## Buildup

### IKEA stores world-wide



Source: the company

THE WALL STREET JOURNAL.

IKEA Chief Executive Peter Agnefjäll flew to New Delhi in November to personally lobby Prime Minister Narendra Modi for a change to the timetable. The Indian government said the clock could start from the time retailers open their first store, giving them a grace period of a few years.

For IKEA that means it now must comply by 2022.

Indian officials warn that additional concessions. "We have liberalized India as much as possible," said Amitabh Kant, the senior-most bureaucrat at India's Department of Industrial Policy and Promotion, which oversees foreign-investment rules.

In 2012, Indonesia unveiled a rule that required franchisees, including IKEA's, to obtain 80% of its goods locally, although the time frame for meeting that requirement was unclear. The government gave IKEA a pass after the retailer argued the policy would thwart business.

The Swedish company potentially has much to gain. While the current restrictions might seem like a headache, IKEA executives acknowledge that making goods in India will help them lower overall production costs. The company also has large manufacturing operations in Europe and China.

Along with IKEA, U.K.-based grocery giant Tesco PLC is plowing ahead in the hopes of eventually opening retail stores with an Indian partner. Trent Hypermarket, a joint venture between Tesco and India's Trent Ltd., declined to comment on the country's local-production rules.

With 1.2 billion people and a middle class bigger than the population of the U.S. by some estimates, India is one of the last big untapped frontiers for international retailers. Last year, it dethroned China to become the world's fastest-growing big economy.

That said, the country is bedeviled by an unskilled labor force, poor infrastructure, outdated technology and red tape, which have kept manufacturing at 17% of the country's economy, versus 36% for China.

Housewares, IKEA's area, are particularly underdeveloped, with an estimated 90% of domestic sales coming from tiny players and craftsmakers, who make everything from cupboards to cushion covers in cramped homes and neighborhood bazaars.

"Just to get people to use the right kind of glue, the right kind of paint—it's difficult. It's very difficult," said Bedraj Tripathy, an associate vice president at Godrej Interio, one of India's largest domestic furniture makers.

In 2012, IKEA started the process of vetting a factory owned by SEL Manufacturing Company Ltd. near the northern city of Ludhiana, which made bath towels. The facility had an impressive client list, including Wal-Mart, Target Corp. and Bed Bath and Beyond Inc. And it met basic IKEA standards in areas such as forced labor and minimum wages, which meant it could start producing for the retailer on a trial basis.

To permanently qualify for IKEA's coveted business, the factory had a year to meet the rest of the company's standards. IKEA adheres to European Union criteria that, for example, sets limits for chemical content in items including table tops and cutlery. India has no binding safety standards for housewares.

The retailer also has a list of workplace rules its suppliers must meet, including no child labor and a requirement employees be trained in firefighting and first-aid, as well as deposit their monthly wages in a bank account—a tall order in a country where nearly half the adult population doesn't have one.



This facility in Bhadohi, a district in northern India, employs 2,000 workers to weave carpets for IKEA's stores around the world. Here, men knot carpets on traditional looms. PHOTO: VIVEK SINGH FOR THE WALL STREET JOURNAL

IKEA auditors found SEL's towel factory wasn't storing hazardous chemicals properly, and that bureaucratic snarls had delayed the issuance of a required environmental permit. What's more, many of the factory's laborers were working 12 to 14 hours a day, taking advantage of an Indian law that requires employers to pay double for time worked beyond nine hours a day.

IKEA proposed the factory divide workers into three shifts of eight hours, its own daily limit for working hours. The proposal cut deep into worker pay. Many laborers quit and joined other factories. Dozens threatened to leave.

"People were turning against us," said V.K. Goyal, SEL's chief executive. "We had nearly given up. We told IKEA it's not possible to do what they want—that too in a year."

IKEA granted the factory another year to meet its standards and worked out a new plan: Hire fresh workers and offer subsidized housing as an incentive instead of overtime.

During the next two years, the factory organized recruitment drives in neighboring towns and villages of the predominantly Sikh region. Managers made announcements on loudspeakers outside Sikh temples and urged local priests to encourage people to sign up. It doubled the size of its housing complex to accommodate 2,000 people and built separate quarters for men and women.

## Some success

SEL's factory became fully compliant with IKEA's standards in December 2014, two years after they began working with the retailer. Last year, the facility shipped about eight million towels to IKEA's stores in Europe and North America, including its popular Hären range. Homes for another thousand workers are under way.

Things were tougher in the traditional carpet belt of Bhadohi, where IKEA began purchasing rugs in the 1990s. In 2009, the company hired carpet supplier Eastern Mills Ltd. to build a factory there, to ensure that its rugs weren't made with child labor. Eastern Mills had sold rugs to retailers such as Macy's and J.C. Penney Co., but had only bought and packed the goods—never produced them.

IKEA asked Eastern Mills to build a plant that would handle spinning yarn, weaving and packaging—a type of facility that didn't exist in Bhadohi at the time.

## In India, IKEA Weaves Change in the Workplace

Ramping up IKEA's business in India has entailed building factory resources and testing cultural norms



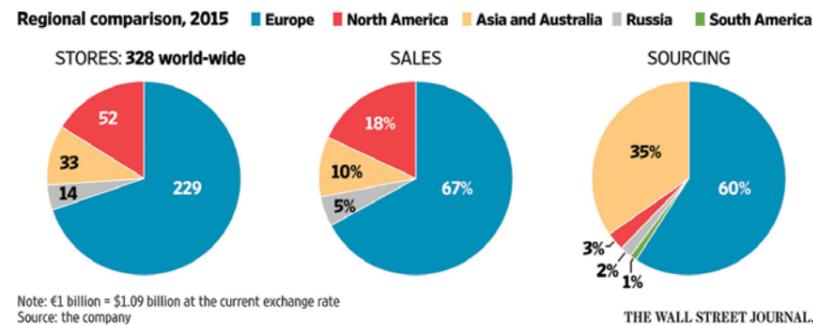
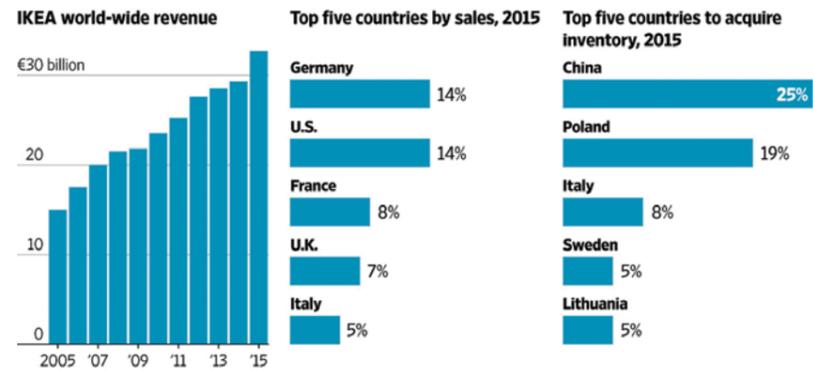
Women use wool yarn to weave a carpet on this loom. One such carpet takes four days to weave, and will ultimately sell in IKEA's stores for \$139. VIVEK SINGH FOR THE WALL STREET JOURNAL

“We had to go door to door to convince people to come out and work,” recalls Zafar Ansari, the managing director of Eastern Mills. Hiring women was particularly hard in the Indian countryside; the factory had none when it opened in 2010.

Mr. Ansari persuaded parents and village leaders to allow women to work, and eventually organized tours around the facility to assure locals it was a safe place. About a dozen women enrolled the next year.

### Wall-to-Wall Coverage

IKEA has been trying to build a network of suppliers in India, from which it currently pulls 3% of global inventory, in order to open retail stores there.



It took two years before the factory was running full tilt. Now, its 2,000 workers produce 175,000 rugs a year for sale in IKEA outlets around the globe. Over its entrance is a sign reading “no child labour” in big block letters. Another sign that says “no spitting” has been less effective: The base of the factory’s white-washed walls is stained red by betelnut chewing workers.



It was a big challenge convincing women to work at the carpet-making facility. Factory officials went door-to-door to assure them it was a safe place to work. Fatima Begum, who joined the factory in 2012, says her neighbors initially chastised her for working outdoors.  
PHOTO: VIVEK SINGH FOR THE WALL STREET JOURNAL

Some who took the leap say they were chastised—at times by their own friends and family. Young mothers faced opposition from their families, who accused them of choosing work over their children.

“They would say, ‘Do you have no shame? How can you dare to work outside your home,’ ” said Fatima Begum, who started working at the factory in 2012 with her husband.

To help ease child-care concerns, Mr. Ansari built a nursery in the plant. IKEA mechanized traditional looms, while Mr. Ansari got everyone to open bank accounts. The factory gave classes on personal hygiene, which discouraged workers from defecating outdoors and spitting in the open.

IKEA currently has more than 45 local suppliers making mostly textile products such as bedcovers, carpets and curtains—around 10 of them signed during the past three years. All those suppliers together would still account for less than 5% of inventory if IKEA were to open a shop in India now, a long way from its target.

IKEA hopes to sign 10 new suppliers this year, including those that can make mattresses, sofas, bookshelves and wardrobes. It will likely have to import most of its furniture, drinking glasses, metal products and ceramics when the first planned shop opens in 2017.

Mr. Sanan, the IKEA official, and his team, are getting creative in their search for more local inventory. One lamp supplier has started making wardrobe hangers. A few others are experimenting with mango bark, bamboo, coconut fiber, jute and sugar cane—resources indigenous to the South Asian nation—to develop chairs and chopping boards.

“We want to continue making more in India,” says Mr. Sanan. “But it will take time to do it right.”

—Sara Schonhardt contributed to this article.

**Write to** Preetika Rana at preetika.rana@wsj.com

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# HUANG CHEN, SABRINA

ASSISTANT CHIEF EDITOR

Caixin.com

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Title of Entry

## After the Flood: Never Let Bygones Be Bygones (2016 · 洪水暴至)

Huang Chen has more than 10 years experience in journalism. She joined Caixin in 2010 after working for a prominent financial website in mainland China. She founded Caixin's data news section in 2011. Now she is the leader of the Caixin Data Visualization Lab in Beijing, which is dedicated to promoting China's data news. It has won numerous awards in recent years and is a test ground that supports readers approach to truth in visual ways.

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Ashley Wei comes from a background of skilled programmers and joined Caixin VisLab in 2015. As a data visualization designer and developer, she integrates cutting-edge art and programming methods into projects to explore data news storytelling. She and her team won third prize in the 2016 GEN News Lab final competition.

# 2016 · 洪水暴至

After the Flood: Never Let Bygones Be Bygones

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财经数据可视化实验室出品

## 洪水突袭干旱村庄

2016年12月8日，大雪节气翌日，台头村的后山西沟没有雪。黄土上，一边是已经枯竭的玉米茎秆，一排一排爬坡而上。当地长年干旱，村民们一年只会种一季玉米。

山的另一边就传出叮叮咚咚的敲打声，二十来个工人在凿石头，排石头。放眼望去，依山延伸的阶梯锥形显现。

台头村村委主任许国柱介绍，工人们正在做土地修复，想要复原那一片在“7·19”洪水中被冲毁的梯田。工程已经开展了一个多月。



洪水袭击过后，台头村商业街上一家综合商店后面的客厅和卧室，墙上光亮的镜子现在满是泥污。室内尚且如此，可以想见室外的洪水破坏有多严重。

台头村，位于河北省西部边陲，石家庄井陘县南峪镇下辖自然村。这里气候干燥，降雨少，亦非地质灾害点，但却是2016年7月北方地区持续降雨所致洪灾（包括泥石流灾害）的重灾区之一，村内八人遇难，三人失踪。除了台头村，井陘县的贵泉村、小作镇，受灾也十分严重。河北省内还有邢台的大贤村、邯郸的武安等地都受到暴雨洪水的冲击。据河北民政厅截至7月25日9时的统计，7月18-21日的那场强降雨造成该省920.6万人受灾、130人死亡、110人失踪。

洪灾过去四个多月，台头村的老人们回忆起那场突至的洪水，茫然、无奈，又悲从中来。“不知道从哪儿来的，”有村民如此描述。他们听说，当时一共有三道洪水，把人“刮”走，把家当“刮”没了。

如今，灾后堆积在台头商业街街口的泥泞已经清理干净，取而代之的是一辆铲车和一堆堆的工程沙土。村民陈利娟走在村口大治桥边，大风刮起尘土飞扬，她转身躲避。

陈利娟原来住在台头村，婚后搬到附近的秀林镇，但仍会不时回娘家。这天她作为向导，与记者同行又重回灾区。“商业街以前是全村最繁华的地方了。”她回忆道。记者沿街数一遍，发现原来的三四十家商户，恢复营业的只有大概半数。

灾后最早开店的是几家粮食综合商店。洪水过后，村民刘明元用了一个星期左右把店里收拾好；灾后

一个月，店里恢复营业。现在店里的货品齐全如昨，但墙上的泥水痕迹还未褪色。刘明元比划着数了数，货品加上一辆车的损失“大几十万元”。他展示一张收款条，纸条上列明村民灾后每人可以拿到900元的基本补助，以及其他几项金额不多的补贴。

也有一些商户被冲毁了，却无力重建。刘国元和妻子原本在刘明元的店旁开有一家服装加工厂，加工外销童装，把自己所有的钱都投入进去。12月8日，在充满潮气的店里，他的二姐刘彦珍说，洪水把他们20多台缝纫机都冲坏了，没钱修理，只能全部变卖。两口子将厂内的工人全部辞退之后，就去了南方城市打工。

“7·19”当天，不止一道洪流在台头村奔涌而过。财新网此前报道指，台头村西山的洪水，在商业街西头分开，又在街的东头重新汇合。街的最东处有一家早餐店，遭受着洪水从南北两个方向的冲击，三面墙壁瞬间被冲走，西墙和里屋的夹墙支撑着只剩骨架的房顶。当晚，早餐店店主张素珍和女儿、外孙一同被洪水“刮”走失踪。

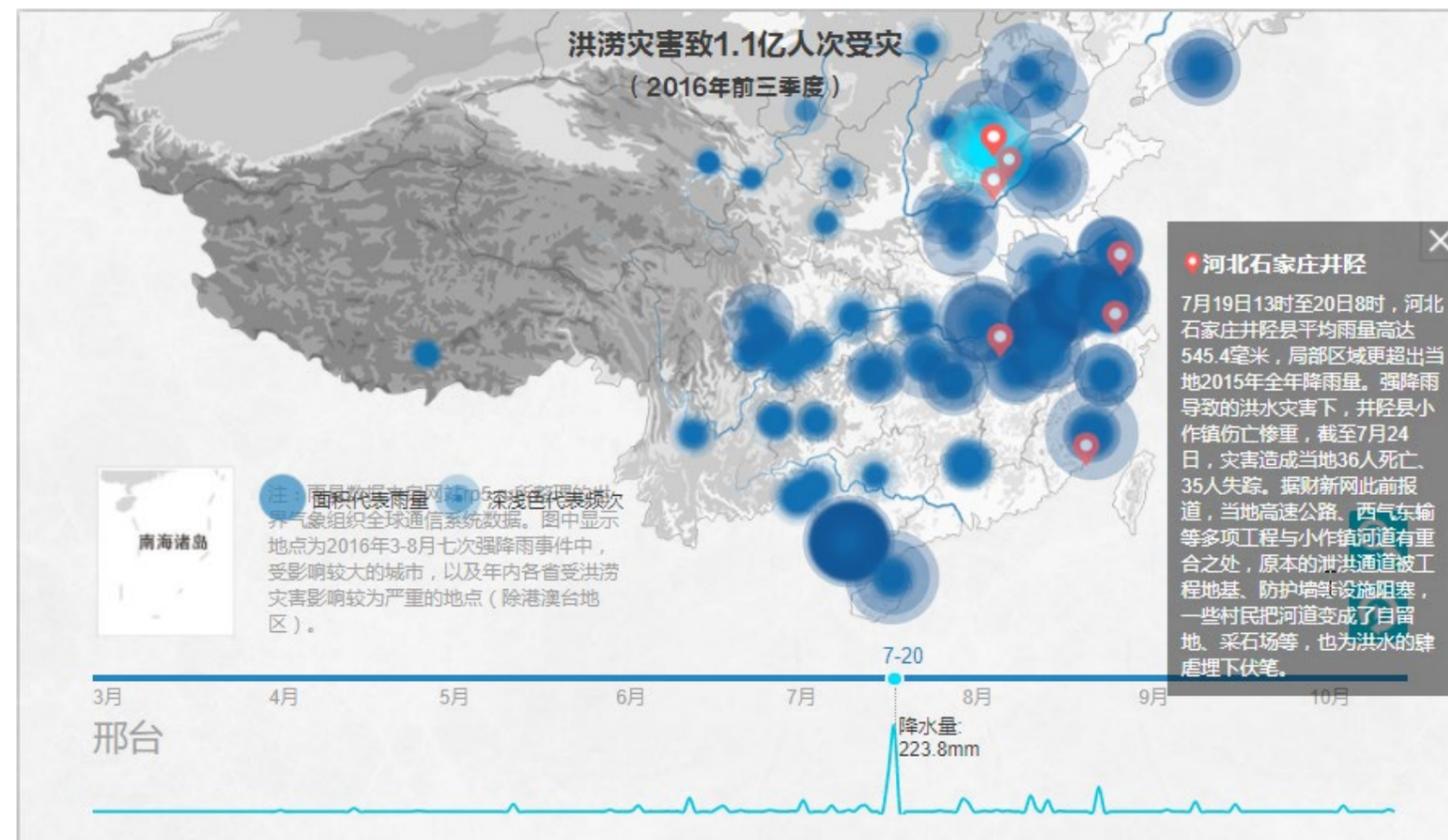
商业街的东南方是台头村的老集贸市场，7月的另一道洪水冲毁了这里的一个公园和一段路。12月18日这天，记者看到村中老街道上，有几段混泥土的

路面已经修好，而公园旧址的一侧也加建了一道约一米高的石墩段。

据财新网此前报道，大约在1966年前后，台头村村民为了扩张用地，开始用垃圾去填埋已经干涸多时的河床，后来在上面种庄稼，修公路。被问及该处从前是否有河水流经，陈利娟说自己压根不知道那里什么时候是河。此外，《财新周刊》今夏一则讲述华北洪水的报道中提到，此次的多个灾区20年没发过洪水，应对洪灾的经验基本没有，也是2016年这场大雨所致伤亡格外惨重的原因之一。谈及今后的防洪工作，许国柱说，村里修了防洪坝，并且会结合气象预报提前预防、预警。

在老街道一侧走上坡，就能到达台头村委会。那里一处展示板上贴着“新建集贸市场和文化广场效果图”，展示对老街道原址的改造，“长280米的新建集贸市场……22厘米水泥混凝土的路面，该街道使用功能兼具行车和泄洪。道路西侧设计为文化广场，广场建筑面积为2600平方米。广场配备休闲运动设施……”工程由北京中安建设有限公司承建，自9月中旬开展。

若干年后，如果台头村再遇到如此极端的大雨，这条新建的集贸市场，乃至后山西沟的那些梯田又是否承受得了冲击？



## 水祸

面对洪水的洗礼，人类多么想挡住其冲击，却又是多么的无能为力。

2016年秋，民政部发布当年前三季度中国自然灾害报告。九个月里，自然灾害共造成中国1.9亿人次受灾，1317人死亡，319人失踪。这九个月，因灾死亡失踪的人口，比此前五年的平均值增加了12%。

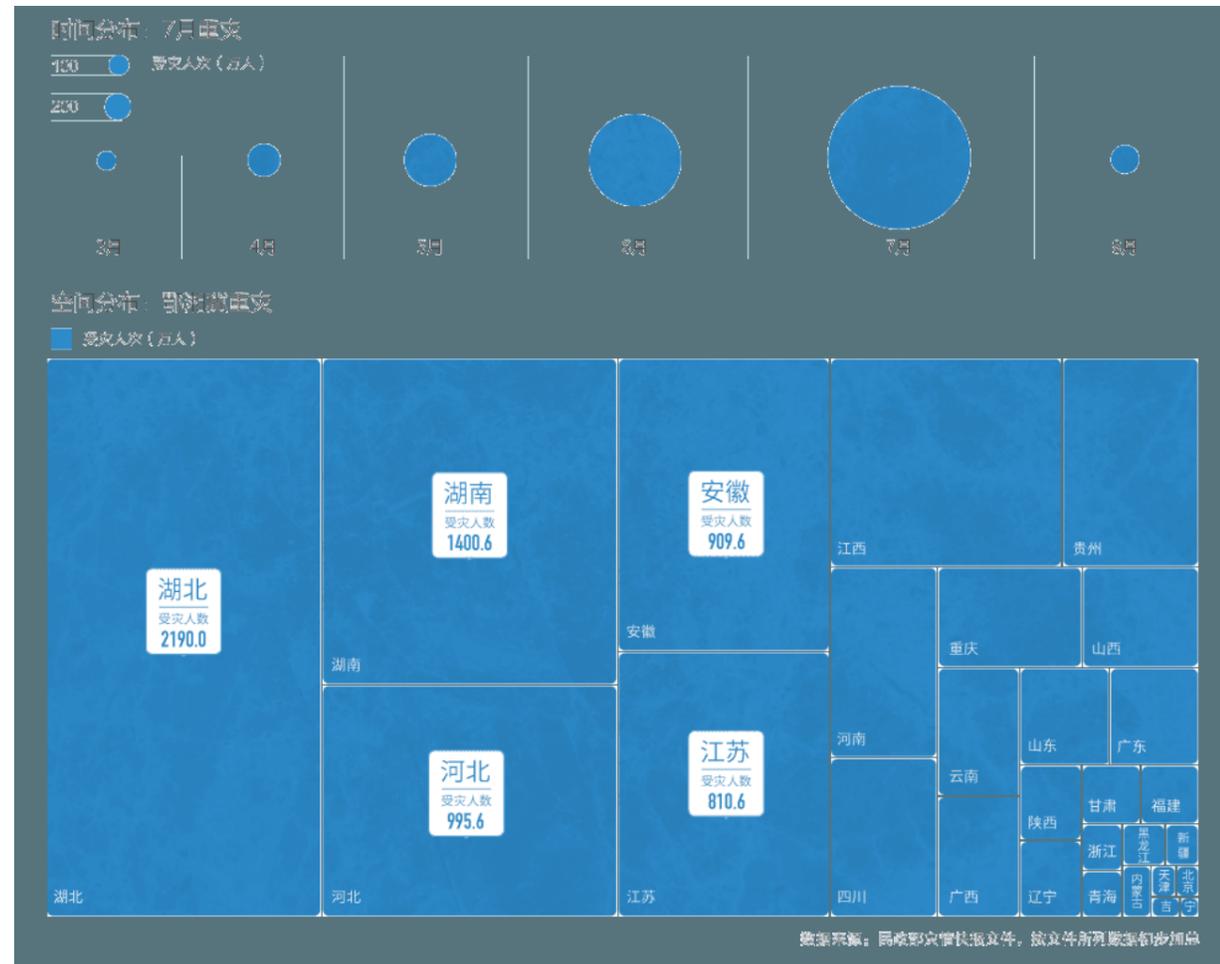
当中以暴雨洪涝灾害至深至广。同样是这九个月，暴雨洪灾共造成1.1亿人次受灾（为同期所有自然灾害受灾人次的58%），1162人死亡或失，604.7万人次需紧急转移；20多个省份受灾，并以冀鄂皖湘等省份洪涝灾情最为严重；灾害所致的死亡失踪人口和直接经济损失均为2011年以来同期最高值。

民政部指出，灾情的时空分布并不均衡。2016年的重大灾害主要集中在6月至7月。

其中在7月，一前一后，一南一北，分别从天而降两次年内造成最重大洪涝的暴雨。单月死亡失踪人口、倒塌房屋数量和直接经济损失均占2016年前三季度灾害总损失的五成。

别过7月河北仓惶悲情的村庄，时间再往回退两周，长江中下游地亦是堤坝溃口、洪水淹村、内涝攻城。

但对于身处江边的人，早在年初，就察觉到长江之水仿佛又有一种异样的涌动。



## 武汉

2016年的南方，春雨绵长。根据气象记录，3月下旬开始，南方持续降雨；至4月初，江南、华南的雨水仍然不停歇。

气象部门曾多番警示2016年防汛形势的严峻。4月初的大雨稍为停歇后，中央气象台发布预报指，当月江南、华南地区将继续有多场降雨。气象局当时

如此描述4月的雨水：“停一天、下两三天”。

这一年，入汛之日也提前了。

3月19日起，受冷空气影响，江南南部、华南东部和北部出现较强的降雨。其后，广东、江西、湖南、福建等地18条河流发生超警洪水。

按照相关规定，“任（何）一（个）入汛代表站发生超过警戒水位的洪水时”，当天即可定为入汛之日。于是，3月21日成为2016年中国的入汛日，这比多年来平均的入汛日期（4月1日）早了11天。

2016年6月的最后一天，长江中下游地区出现当年入汛以来的最强降雨，沿江地区降雨量较常年同期偏多一到两倍；至7月7日，雨带才逐渐移开，并向长江上游推进。

这场大雨影响甚广，包括安徽、湖北、湖南在内的11省份遭受了不同程度的洪涝、滑坡、泥石流等灾害。

而谈及长江洪水与暴雨，必然回忆起武汉的大水围城。

这场广泛影响长江中下游的降雨对武汉造成的冲击尤为严重。据人民网报道，此次降雨突破武汉有记录以来的周持续性降水量最大值。一周累计降雨量相当于40个武汉市内最大湖泊东湖的容量。7月6日10时，渍水漫城最严重的时候，武汉市全市共有162处渍水点，市内交通瘫痪。即便是习惯了每逢夏季必然“看海”的武汉市民，也会对这场罕见大雨引起的严重内涝抱怨诸多。



武汉蔡甸区2万人雨夜紧急大转移：7月5日，蔡甸区消泗乡进行近两万人的大转移，69岁的戴香绪和老伴带着两套被褥，几件换洗衣服就走了，因为收拾东西到很晚，他们在凌晨才离开村子，他们的女儿和孙子也回来帮忙了。

湖北武汉，又名“江城”，因长江之水冲流而立。武汉人可能是最懂得如何与长江之水共处的人。《武汉市志》记载，武汉地处长江中游，江汉平原东部，早在5000多年前，就有人于此聚居生息。长江支流过境，造就了这片水丰草茂的沃土，带来农耕及文明，河道亦成就了当地的经贸发展。

然而，江水也会无情地扫荡这一切。地方志援引了《湖北省近五百年气候历史资料》的记录：湖北沿江的涝洪等灾，多因连日暴雨造成；而武汉市春、

夏、秋三季均会出现连日暴雨。此外，长江日报曾报道，武汉市平均海拔为21-27米，比长江汉口站最高水位（1954年的29.73米）低2-8米，并指“汛期之中，江水悬在武汉头顶。”

武汉市部分地区处于江汉平原洼地。根据《气象灾害丛书——暴雨洪涝》（下称《暴雨洪涝》）一书，江汉平原是长江流域的沿江洼地，因受江河高水位的顶托，当地丧失自排能力、排水受阻、排水动力不足，因而洪涝灾害易发。

除了气候和地理等自然特征影响着武汉的洪水，人类活动也是一个导致当地漫水没城的原因。该书列举了人为因素对暴雨洪涝灾害的主要影响，包括破坏森林植被、围湖造田或建房、侵扰河道、过量抽取地下水等。

每当武汉成为泽国，当地填湖造地的问题就会一次次地被广泛讨论。武汉虽常年受洪水侵扰，但市内本有许多具有调蓄功能的天然湖泊。然而，据财新《新世纪》周刊在2011年发表的一篇报道，武汉填湖造地，几乎毁灭了“百湖之城”武汉的湖泊调蓄优势，也在很大程度上酿成了水淹全城的恶果。

以武汉沙湖为例，财新记者曾对比多张卫星图像，结果印证其湖面面积在十多年间变动显著。位于武汉武昌区的沙湖，为市内著名城中湖之一，对比2000年至2016年的历年卫星俯瞰图，不难发现湖面面积逐年缩小，其后更有房地产楼盘建设在这块新造陆地之上。

官方也提出过相应的措施。2013年6月的武汉市防汛会议上，武汉市水务局承诺，利用三年时间，投资130亿元，加强城市排水管网建设、加强清淤疏浚、推进污水处理建设，实现在“日降雨200毫米以内、小时降雨50毫米以内”，中心城区也不用“看海”。然而，三年后的2016年，大雨来时，漫水依然。

## 自然？人为？

文明因水而生，城市因靠水而取得诸多优势。人类离不开水，就要学习与之共存。

而水又可以有多无情？《暴雨洪涝》一书中写道，中国是世界上洪涝灾害最为严重的国家之一，国内有三分之二的资产、二分之一的人口、三分之一的耕地位处洪涝灾害威胁区域内。

根据《中国水旱灾害公报2014》，1950年至2014年，中国年均因洪涝灾害死亡人口达4327人，总计逾28万人死亡。2000年至2013年，洪涝灾害平均每年造成逾1.3亿人次，相当于中国人口的十分之一。

经济损失方面，《公报》数据显示，1990年（此前无同一口径的统计）至2014年间，洪涝灾害年均造成直接经济损失1387.98亿元，总计约3.47万亿元。

据《暴雨洪涝》，自上世纪90年代以来，洪涝灾害造成的直接经济损失，约为全国各类自然灾害总经济损失的62%，大约为同期GDP的1.55%。并且，近50年间，中国的“洪涝灾害发展具有面积增加和危机加重的趋势”。虽然分年份看来，各年受灾情况波动较大，但书中列举1950-2000年各个年代的洪涝灾害总受灾面积，依次为740万公顷、760万公顷、540万公顷、1047万公顷、1467万公顷，受灾面积增加趋势较为明显。

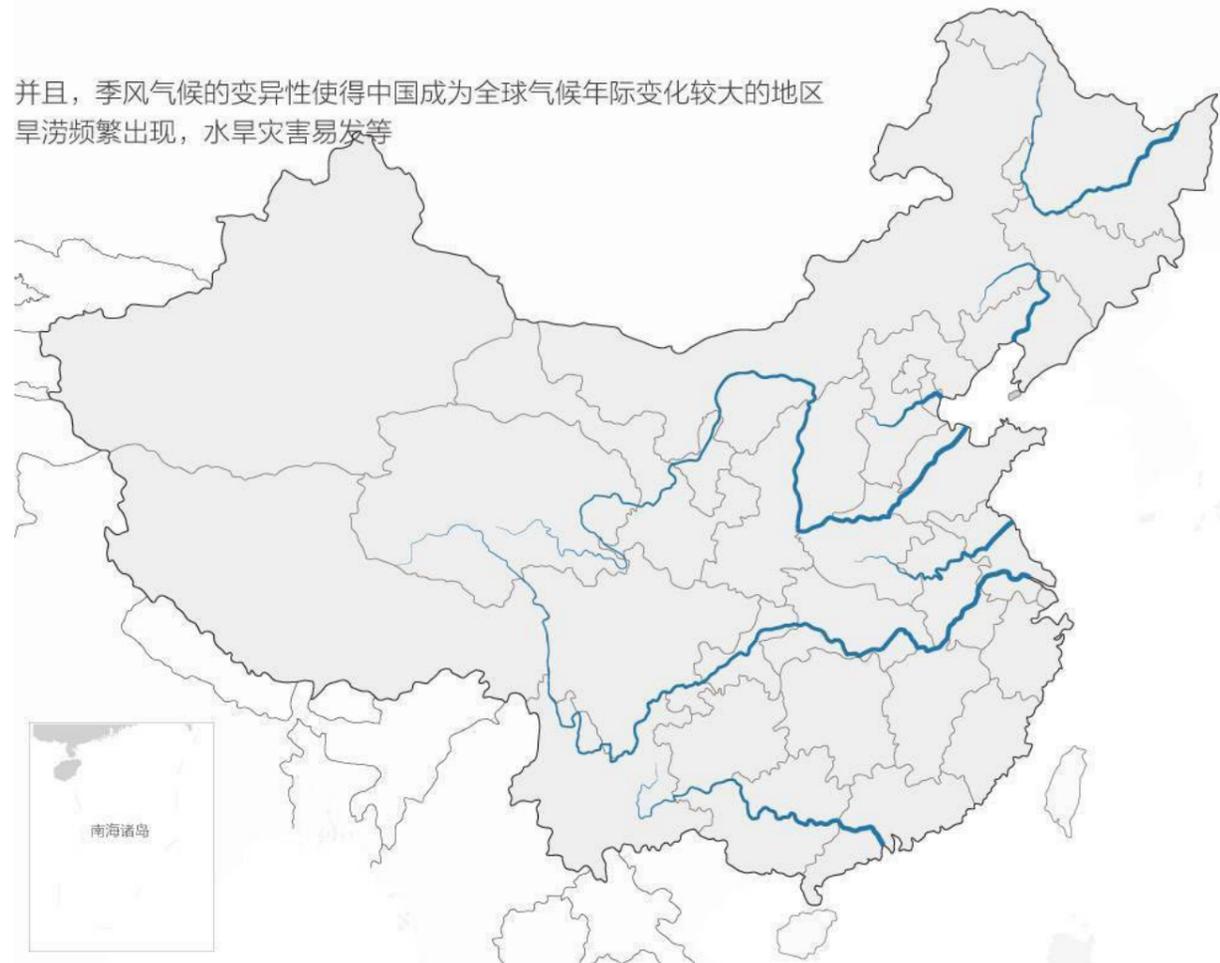
中国缘何频繁遭受洪涝灾害困扰？地理、气候环境可以给出一部分答案。《暴雨洪涝》一书涉及中国

重大洪涝灾害发生规律的相关章节中，将中国的自然地理环境，概括为以下特点：纬度跨度大，横跨赤道至寒温带六个温度带；海陆分布对比大，东迄太平洋，西缘亚欧大陆；地势复杂，西高东低，可由西向东分为三级阶梯。

如此特征，与大气气候相互作用，致使中国土地上冬夏季风显著，东部地区降雨量多。此外，季风气候的变异性导致中国成为全球气候年际变化较大的地区，旱涝频繁出现，水旱灾害易发。

加之，中国江河较多，流域面积达100平方公里的河流逾5万条，流域面积达1000平方公里以上的共约1500条。然而，河流分布并不均匀，珠江、长江、黄河、淮河、辽河、海河和松花江——中国七大水系的流域或下游多数集中在东部气候湿润的季风区。流域地区易生暴雨洪水。

并且，季风气候的变异性使得中国成为全球气候年际变化较大的地区旱涝频繁出现，水旱灾害易发等



数据来源：气象灾害丛书——暴雨洪涝、中国天气网

近40年来，中国城市化进程迅速。全国城镇化人口比例，自改革开放之初（1978年）的18%，提升至2015年的56.1%。城市将人类活动集中起来，严重考验环境的承受能力，同时，因为要支持人类活动，自然环境通常被过度开发。

以长三角地区为例，《长江流域资源与环境》期刊在2013年曾刊登过一篇有关当地城市和对洪灾风险

影响的研究论文。该文如此开篇：城市化促进经济发展的同时，也深刻地改变洪水灾害体系，使洪涝灾害日益加剧。

前述研究锁定了长三角地区中的六个城市化典型区域（里下河区、秦淮河区、武澄锡虞区、浦东浦西区、杭嘉湖区及甬曹浦区），评价在1991年、2001年及2006年的三个时段中，城市化是如

何影响这些区域内的洪灾风险。所得结果如下：虽然在研究期内，这些地方的防洪减灾能力有所提高，但各个区域的洪灾风险却在增加。对此，研究团队认为，上述区域的防洪减灾基础建设与措施跟不上城市化的发展速度。

并且，城市化不断侵占河道、池塘、水田等，使得水域面积缩减而降低当地蓄滞洪水能力；城镇面积扩大，减低土地透水能力等，亦是导致风险增加的原因。

官方文件中也曾有类似表述。水利部国际合作与科技司在《水利科技发展“十二五”规划》一文中如此着墨：“近年来，受人口增长、经济社会发展方式粗放以及气候变化等因素的影响，防洪减灾形势更加严峻，流域性大洪水、特大暴雨洪灾和超强台风频繁发生。”此一发表于2010年的文件也提到，中小河流和中小城市防洪标准偏低，山洪地质灾害导致人民生命财产损失严重，需要建设完善可靠的防洪抗旱减灾安全体系。

## “98”和厄尔尼诺

新世纪以来，人们似乎依然没能摆脱1998年大洪水的梦魇。

那场被喻为“洪魔”的长江大水，曾横扫湖南、湖北、江西、安徽、江苏等省份，夺走1562条生命，

致8411万人受灾，造成直接经济损失1345亿元。

“98洪魔”凶狠之处在于，降雨强度特别高，突发暴雨强度大而少见，且雨水集中在长江一线。当年夏季汛期77天，雨带长期徘徊。

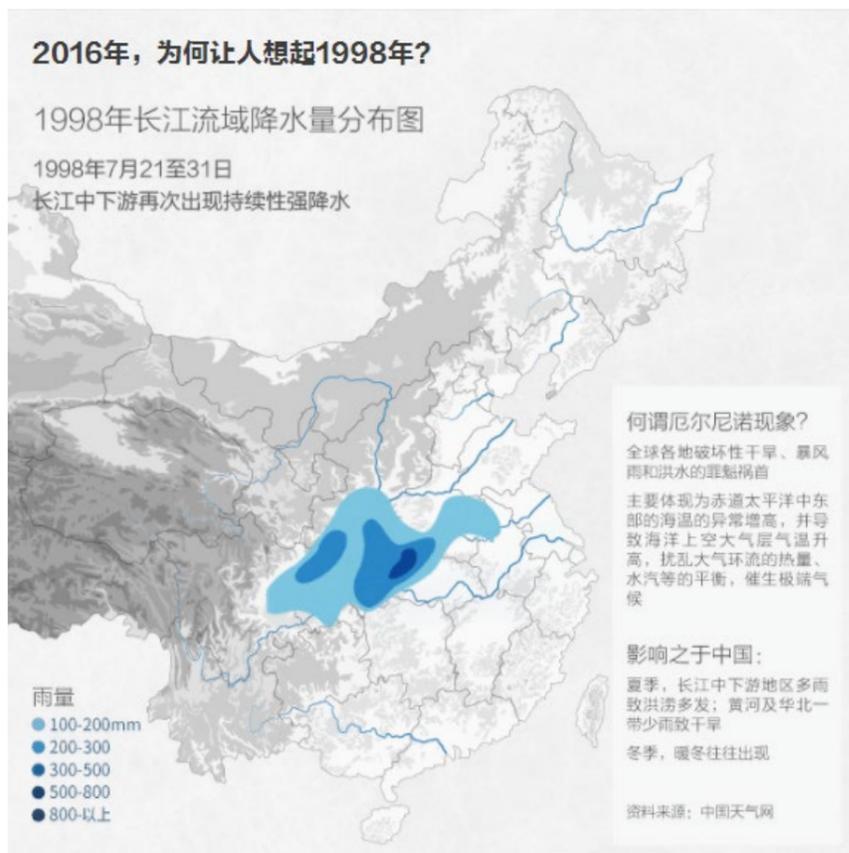
而在2016年初，国家防总就指出，“长江流域发生大洪水的可能性很大，要以防御‘98+’大洪水为目标。”

2016年与1998年的相似之处，还在于两年同为超强厄尔尼诺事件的次年——中国通常在这样的年份发生洪灾。

2016年4月初，国家气候中心的监测显示，此次厄尔尼诺事件自2014年9月开始发展，在某程度上已经超过了1997年至1998年和1982年至1983年的两次超强厄尔尼诺事件。

中国气象局在2016年11月下旬公布了当年截至11月20日的雨量数据：中国全国平均降水量711毫米，为1951年有相关记录以来最多的一年，其中江苏、福建、新疆降水量破纪录。全国主要江河流域降水均偏多，长江流域为1954年以来最多，全国有184个县市累计降水量超历史极值。

然而，这一年破纪录的降雨量与厄尔尼诺事件，乃至洪涝灾害的相关性还待科学家进一步研究，亦盼日后人们对洪水灾害更能防患未然。



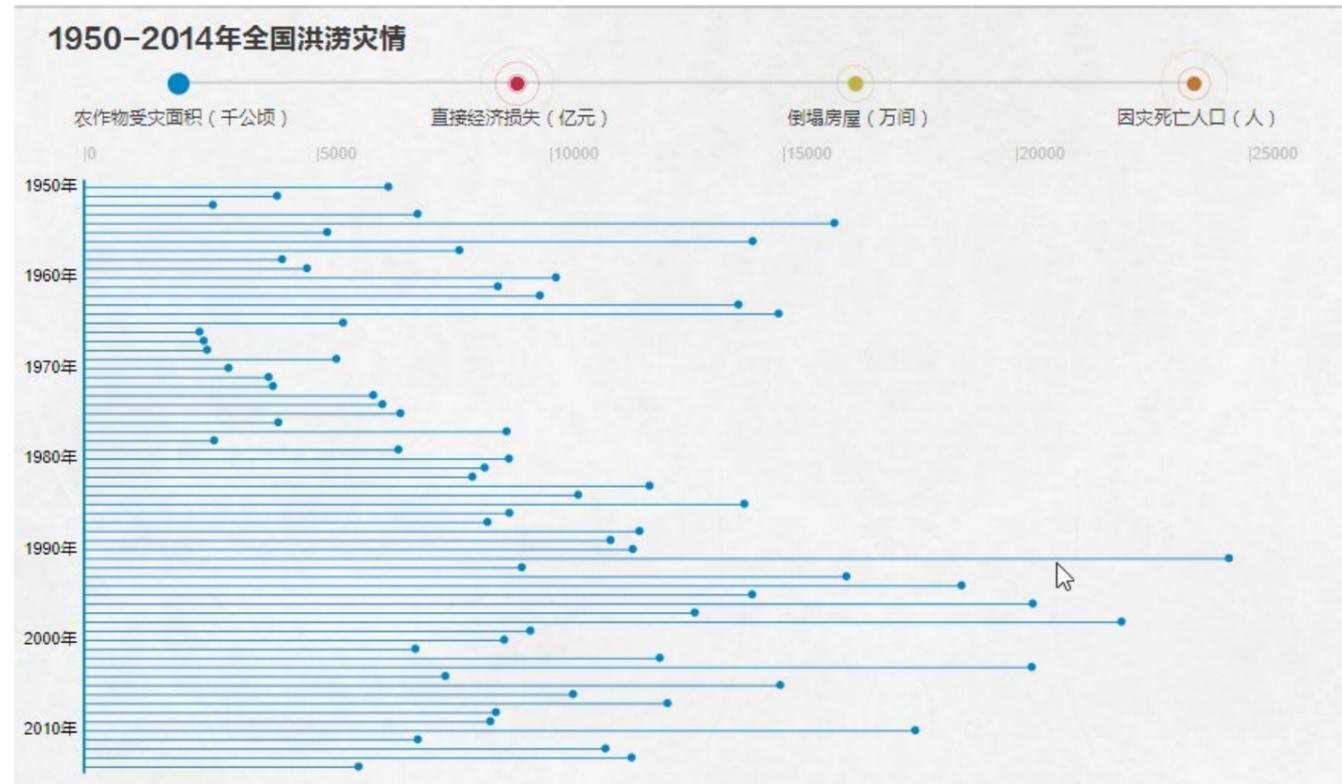
## 救灾之变

世纪洪水、1951年以来的最大雨量、超强厄尔尼诺事件的后续等，这些标签令2016年的洪水得以引起广泛的关注。

然而，洪灾年年有、处处有，许多区域性的中小型灾害的受关注程度通常只流于短消息一则，即使这些灾害对于受灾地区的人们冲击巨大。

中国科学院大气物理研究所的一项研究——《暴雨洪涝灾害灾情级别及其空间分布》，将中国1991年至1994年的暴雨洪涝灾情（包括受灾面积、死伤人口、经济损失等方面），按轻、小、中、大、巨分级。研究结果显示，轻小灾占有所有灾害次数的83.2%，巨灾则占2%。

——洪灾年年有、处处有，但“因为许多中小型灾害是区域性的，很难引起大范围的关注”。



数据来源：中国水旱灾害公报 2014

“因为许多中小型灾害是区域性的，很难引起大范围的关注，但对于这些（受灾）群体来讲，损失不一定是轻的，也可以是很严重的。”壹基金备灾救灾部主任沙磊如是说。2016年的夏天，他和团队参与了湖北、河北等地的洪灾救灾工作。

2016年7月下旬井陘的那场洪水后，沙磊与团队留意到，一些没有人员伤亡的家庭，损失也比较重。例如，当地建的都是传统的石片房，或者是一些在山上掏的窑洞。当中一些民房直接被冲毁，对于这些家庭来说，这样的冲击也是难以承受的。

湖北武汉发大水时，沙磊团队也赶到武汉新洲区。他回忆，水淹过来之前，他们把村民转移到学校去，一个教室住上20多人，通风只能靠一两台电扇。当时教室里的温度高达38至39度，就像一间桑拿房。他认为转移安置点的卫生条件也十分值得关注。

沙磊自2007年开始投身救灾、灾后重建的工作中，至今夏已有快十年的经验。在他看来，公众对救灾工作的观念在这些年间有了一些改变。关于灾害，从前人们通常听到的是一些受灾数字，但慢慢地，公众开始更加关心受影响群体的灾后生活是否得到关怀。正如在武汉新洲区的那间教室，人们会问那里的卫生条件是否够好，儿童是否有地方玩耍。

不过，沙磊还观察到，一些农村的灾害自救能力变差了。

城镇化带来的农村空心化，在灾难面前被放大了。沙磊称，一些空心化的农村在遭遇灾害后，应对能力和组织性都没有那么强了。“发救灾物资的时候，要扛米扛面的，但村里没有年轻人，都是老人，你必须把东西送到他们（老人）手里，老人没办法走很远。”

灾害过后，青壮年回家陪伴老人、小孩的时间通常也不多。如今，救灾不只是一个帐篷、一床被子的事。例如，救灾工作需要父母缺席时，代为减轻灾害为儿童带来的心理冲击。儿童服务站就是方法之一：在灾区搭建一个活动板房，让小孩可以玩玩具，每天上音乐、美术课等。沙磊认为，这些工作可以让孩子感受到自己是被关怀的。

“城镇化确实是个大环境，”他坦言，农村的空巢化体现在救灾上，就是救援组织要设法为这些老人和儿童提供专门的服务。



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