

# Cambodia News Articles from January 2020 to April 2022



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## **India and Singapore organise East Asia Summit workshop on IUU fishing**

<https://orissadiary.com/india-and-singapore-organise-east-asia-summit-workshop-on-illegal-unreported-and-unregulated-fishing/>

"The Department of Fisheries, Ministry of Fisheries, Animal Husbandry and Dairying, Government of India, and the Government of Singapore organized a virtual East Asia Summit (EAS) Workshop on Illegal, Unreported, and Unregulated (IUU) Fishing yesterday, co-chaired by India and Singapore Food Agency (SFA). Shri Jatindra Nath Swain, Secretary, Department of Fisheries (DoF), Government of India, gave the keynote address. The workshop was attended by 8 EAS member countries, and 4 knowledge partners, officials of the Department of Fisheries, Government of India, fisheries officials of different States/Union Territories, and other invitees.

In his inaugural address, Shri Swain highlighted the urgent call for combating illegal, unreported and unregulated fishing. Mr. Swain shared some of India's efforts and initiatives to combat IUU fishing especially through working with coastal fishing communities.

The Workshop began with the opening session led by India and chaired by Joint Secretary, Department of Fisheries, Government of India, Dr. J Balaji. During the welcome address, Dr. J Balaji introduced the theme of the workshop and welcomed all the esteemed delegates, panelists and participants in the Workshop from the countries of Australia, Cambodia, China, Indonesia, New Zealand, Republic of Korea along with India and Singapore. In his opening remarks to the EAS IUU Workshop, the CEO of the Singapore Food Agency highlighted the importance of combating IUU fishing which has negatively impacted the livelihood and food security of the coastal fishing communities.

The Technical Session 1 was focused on regional collaborations in combating IUU fishing and was Chaired by Singapore Food Agency. The knowledge-partners, namely, the Bay of Bengal Programme Inter-Governmental Organization (BOBPIGO), the Commonwealth Scientific and Industrial Research Organization (CSIRO), the Southeast Asian Fisheries Development Center (SEAFDEC) and the UN Food and Agriculture Organization (FAO) shared the regional efforts and the groundbreaking and continuous efforts being taken to combat IUU fishing. During the Technical Session 2, representative from each participating country shared their national success stories, experience gained and measures being taken up by the respective country to curb IUU fishing."

## **New book explores environmental crisis facing Cambodia's Tonle Sap Lake**

<https://www.voacambodia.com/a/new-book-explores-environmental-crisis-facing-cambodia-s-tonle-sap-lake/6526503.html>

The Tonle Sap Lake has been at heart of Cambodian civilization since ancient times, but this extraordinary ecosystem, and the millions of people who rely on it, are at critical juncture, threatened by a “trifecta” of local, regional, and global destructive forces.

A new book by American journalist Abby Seiff describes the natural wonder of the lake's connection to the Mekong River and the historical importance of its natural bounty to the Khmer people. But it warns that over the past decade a multi-level environmental crisis has pushed Asia's most productive inland fishery to the brink of collapse.

During a recent discussion about the book, Seiff said that a local failure to stop overfishing, unbridled hydropower dam development in the Mekong Region, and global climate change were putting enormous stress on the lake. “All these things are working in concert... it's a trifecta of problems,” she told Brian Eyler of the Stimson Center, a U.S. policy and research institute hosting the virtual talk.

Seiff described visiting various fishing communities—which live on shore, in wooden and bamboo stilt homes in the lake or in floating homes—and found most could no longer survive off the lake's once-abundant freshwater fish catch. Many villagers were mired in debt and heading to urban areas in search of jobs, Seiff learned through reporting and research.

“Many fishers I spoke to want social support,” she said, explaining that they want alternative sources of livelihoods to supplement their fishing income.

Eyler said the book, titled “Troubling the Water: A Dying Lake and A Vanishing World in Cambodia,” stood out for its poignant personal stories of life on the lake, which were “a unique contribution to literature and ongoing discussions on the future of the Mekong.”

### **Droughts and government failures**

A spate of dams constructed upstream in Laos and China in recent years, and irregular rainfall due to climate change, have caused extremely low water levels in the Mekong River. This, in turn, weakens the unique hydrological process that occurs in rainy season, when the swollen Mekong discharges into the lake through a tributary and increases its size seven-fold.

This feature supports a huge and highly diverse fish stock. This ranges from the critically endangered Giant Mekong Catfish to the tiny Trey Riel, which is caught in large volumes and turned into prahok, a fermented fish paste that is a staple and key source of protein in Cambodian food.

“Two years ago, the lake was just a quarter of its usual volume” in wet season, Seiff said, noting that such alarming situations had become a regular occurrence in recent years. “In 2016, there

was horrific drought, forest fire and the fish catch was very low, so everybody was deeply in debt.”

Despite the lake’s status as UNESCO Biosphere Reserve, the Cambodian government has long failed to stem illegal fishing by both small fishermen and, more destructively, large-scale operators. Meanwhile, flooded forests that serve as fish habitat have been cleared by well-connected businessmen and local officials, who then rent it out for paddy farming.

Ministry of Agriculture spokesman Ung Try said he could not comment on the book’s claim of government failures as he had not read it, but added that “illegal fishing declined a lot” after recent measures. Last month, Prime Minister Hun Sen announced a crackdown on illegal fishing, encouraging local officials to ramp up law enforcement.

In the first week of April, 29 people were arrested and another 20 were summoned to court in six provinces, while 59 fishing boats were seized along with banned fishing equipment, including 1,200 meters of nets, according Ministry of Agriculture data provided to VOA Khmer.

Seiff, who worked for years with the local Phnom Penh Post and the now-shuttered Cambodia Daily, said Hun Sen’s order followed a familiar pattern of government public announcements and actions that lead to few results that meaningfully protect the lake.

“We don’t really hear about it afterwards and we don’t know the people who are being arrested.” she said during the discussion. “I wouldn’t be surprised if these are the local and medium-level people, those are the easier ones to catch... But you need to look at the bigger people behind this systemic problem.”

Seiff, nonetheless, remains “hopeful in some ways as the government is recognizing the importance of the lake and the Mekong,” though it appears politically unwilling to tackle on-the-ground causes. Cambodia also has little influence on upstream dam development or international efforts at climate change reduction.

Widespread decline in catch, but a lack of data

The book, like much local media reporting, details how many fishers have witnessed the disappearance of many species, while their catch has become far less in recent years and is only a fraction of what the previous generation was able to haul in. Seiff also pointed to the rising prices for prahok fish in recent years as indication of a drop in catch of Trey Riel.

However, Seiff and Eyler noted that the absence of reliable scientific data on current fish stocks and volume of catch has made it difficult to ascertain the precise scale the problem.

“We really don’t know, that is the key issue. There is no good science and no good data on the state of Tonle Sap fisheries. And the data that comes out of the Cambodian government is often altered for political purposes, so there are reasons not to necessarily believe that wholesale,” said Eyler, who authored a 2019 book called “Last Days of the Mighty Mekong.”

A 2021 VOA Khmer investigation also raised questions about the accuracy of government data, which claimed a continued high annual catch that does not match with widespread local accounts of plummeting volumes.

The most recent government fisheries report dates from 2020 and states some 413,000 tons were caught. Which is significantly down from 524,000 tons the year before, though still above the roughly 400,000 tons in 2010 that the government reported to the UN's Food and Agriculture Organization.

In Cambodian society, however, few people doubt that their storied 'great' lake and its fisheries are facing an existential threat.

"We have seen since a while ago that we import fish from Vietnam and Thailand to Cambodia. It's farmed fish. So where is the world-famous fish from the Tonle Sap basin?" said Yong Kim Eng, president of an NGO called People Center for Development and Peace.

"If we can't control [the Tonle Sap crisis] and if we don't take clear action, it will cause huge problems to the living standards of the people," he said.

### **Cambodian Agriculture Ministry to redeploy confiscated fishing equipment**

<https://www.khmertimeskh.com/501052908/agriculture-ministry-to-repurpose-confiscated-fishing-equipment/>

The Minister of Agriculture has instructed officials to use equipment confiscated during a crackdown on illegal fishing on the Tonle Sap lake for other agricultural and fishery activities instead of destroying them.

Since the campaign started last month, at least 13 fish traders have been arrested for fishery crimes in the provinces of Kampong Chhnang, Pursat, Battambang, Kampong Thom, Banteay Meanchey and Siem Reap. The crackdown has seen the confiscation of a lot of equipment used for illegal fishing.

The Facebook page of the Minister of Agriculture Veng Sakhon yesterday instructed the Fisheries Administration and the Provincial Department of Agriculture to build a case file for both the perpetrators and the confiscated equipment to be sent to the court. He added that some equipment should be used in agriculture after the court ruling.

"Some equipment that has been confiscated should be used in agricultural sectors after the court decision," Sakhon said. He added that "In particular, engines and boats should be used to serve provincial fishery authorities."

Pursat Provincial Governor Cheav Tay said the provincial authority has confiscated a lot of equipment in Pursat, and 10 people have been arrested for illegal fishing on the Tonle Sap lake.

“Some of the equipment used for illegal fishing will be destroyed, but we will use some in the agriculture department and some will be used as court evidence,” said Tay.

Tay added that the provincial authority has also urged people who are fishing illegally on the lake to voluntarily hand over equipment to officials.

Kampong Chhnang Provincial Deputy Governor Sann Yu said: “All the equipment used for illegal fishing that the provincial official gets is by patrolling or fishing families voluntarily handing over equipment.”

“Since the crackdown on illegal fishing on Tonle Sap lake, provincial officials have confiscated a lot of equipment used for illegal fishing,” said Yu.

Attention was drawn to illegal fishing after Royal Academy of Cambodia President Sok Touch informed Prime Minister Hun Sen that if unchecked illegal fishing continues on Tonle Sap lake in the six provinces, it will deplete national resources.

This came after the Prime Minister’s hard-hitting message on Wednesday when he ordered the governors of the six provinces to clamp down on illegal fishing on the lake, especially the main perpetrators behind the activity.

Following the Premier’s orders, governors and relevant authorities in all the six provinces have swung into action to crack down on illegal activities on the Tonle Sap lake.

Last week, the Ministry of Agriculture announced three hotline for people, including the media, to report illegal fishing activities on the Tonle Sap lake. The numbers are 012 995 665, 017 735 169 and 012 871 071.

On March 24, relevant ministries together with those from the six provinces met to discuss measures and strategies to solve this issue with a focus on regular patrolling and apprehending the main perpetrators behind these illegal activities.

### **Cambodian PM orders provincial governors to crack down on illegal fishing in Tonle Sap Lake**

<https://www.khmertimeskh.com/501046765/prime-minister-orders-provincial-governors-to-crack-down-on-illegal-fishing-in-tonle-sap-lake/>

All provincial governors, police, and army whose jurisdiction borders the Tonle Sap Lake have been told to stamp out illegal fishing starting from yesterday.

In issuing this directive yesterday, Prime Minister Hun Sen called on those behind the illegal fishing, including fishermen, to stop it immediately or face the consequences.

The Premier said this at the closing ceremony of the annual meeting of 2021 in the Ministry of Agriculture.

He said this after the Royal Academy of Cambodia president Sok Touch highlighted to him that rampant illegal fishing has been going on in Tonle Sap Lake in Kampong Chhnang, Kampong Thom, Siem Reap, Pursat and Banteay Meanchey provinces and if this continues, the nation will lose its national resources.

The Prime Minister said that he wants to inform all relevant officials about illegal fishing in Tonle Sap Lake and will observe over a few weeks what they have done and did not do.

“A few days ago, an official who observed the illegal fishing activities send a message to me and I forwarded it to the provincial governor. The provincial governor replied to me that they couldn’t make arrests because they run away so fast,” said Mr Hun Sen.

He said this was the same excuse given by some provincial governors and he doesn’t understand why they cannot make arrests when they have enough means and transportation to crack down on them.

“Why are they faster than the officials? I will bring a helicopter to patrol and crack down on these illegal fishermen at the Tonle Sap Lake and arrest them. Pursat province arrested some but another province makes no arrest at all,” he added.

He said that the provincial governors of Kampong Thom, Kampong Chhnang, Pursat, Banteay Meanchey, Siem Reap and Battambang should not be there if they cannot intervene and fix the issue and that they should not wait for relevant ministers to intervene and resolve it.

He ordered the provincial governors, relevant officials, and ministries to take immediate action and stop the illegal fishing and arrest those involved.

He said the police and army should lead the officials to crack down and find the main suspects behind these illegal fishing and the Ministry of Agriculture must work on this issue and cooperate with them.

He added that the illegal fishermen and those behind this illegal activities are rich.

In the past, he said the officials managed to crack down on some fishermen but the arrest of those involved in this has not been succeeded.

“Is there a reason why the officials have not been successful in arresting the main people behind this illegal activities or have the authority been involved in corruption?,” asked Mr Hun Sen.

**200 families still living on the river in PP despite orders to leave in Cambodia**

<https://www.khmertimeskh.com/501034001/200-families-still-living-on-the-river-in-pp-despite-orders-to-leave/>

Since June last year, Phnom Penh City Hall has been dismantling floating houses, illegal structures and fish farming on the river in five districts.

Despite thousands of them being dismantled, there are still some 200 fish farming families living on the river as their livelihood depends solely on the river and they have no other businesses or anywhere to go.

Phnom Penh deputy governor Keut Chhe yesterday told the Royal Government Spokesperson Unit (RGSU) that the government needs to give another three years for these fishing communities to leave the river and find other jobs.

“These communities solely depend on the river for their livelihood and they have been doing this from one generation to another. Despite the order to evacuate, they do not know where to go, what work to do and they are in a dilemma,” he added.

He said the authorities have asked them to stop their fishing business on the river in three years because they understand their plight and their need for money to start a new business or learn a new skill.

Chhe said there are people who have been studying in schools for years and in spite of being educated and qualified, they still cannot get a decent job and officials expect this fishing community to look for another job besides that on the river.

“That is why the City Hall has given them some grace period, to raise fish, earn some money and change their business,” he added.

He said that there are about 200 fishing cages along the boundary of Phnom Penh’s Prek Pnov district and Kandal province with another 200 metres of ongoing fish raising.

He said the authorities are closely monitoring the activities on the river and any new fish cages being built by farmers will be dismantled immediately. Chhe said the authorities will not allow any of those raising fish to pass or rent their business to others as the river belongs to the state.

According to the Fisheries Administration’s report, the total yield of the aquaculture and fisheries sector last year was 856,400 tonnes, of which 383,050 tonnes were freshwater, 125,000 tonnes were marine and 348,350 tonnes were aquaculture. Export from the sector was clocked at 3,469 tonnes. Profits from the sector was reported to be more than \$1.713 billion.

The report added that there are a total 516 fishing communities in the country (475 freshwater communities and 41 marine communities). The communities are equivalent to 147,518 or 332,168 people.



## **Conserve dolphins, not harm or kill them, Cambodian fishing communities urged**

<https://www.khmertimeskh.com/501027317/conserv-dolphins-not-harm-or-kill-them/>

"The fishing communities residing along the Mekong River in Cambodia have been urged to cooperate with the authorities and the Non-Governmental Organisations for Fisheries in dolphin conservation by not laying fishing nets to harm and cause the mammals deaths. This is because when the dolphins get tangled up in the nets, rope, or fishing lines, they can get injured or die when trying to break free or they can die from infections or starvation.

WWF Cambodia country director Seng Teak said yesterday that all stakeholders must take proactive measures to prevent the remaining dolphins in Cambodia from dying after the recent incident at the Mekong River in Stung Treng province.

The last surviving freshwater Irrawaddy dolphin died on Tuesday after getting tangled in a fishing net near the border with Laos. Teak said there is an utmost urgency to save the dolphins and it could only be done with the cooperation of the government, stakeholders, the people, including fishing communities, and by also taking control of the water flow along the Mekong River bordering near Laos.

"We know it is difficult but the two nations can work together on this," he said adding that the dolphins' biggest enemy are the fishing nets and this laying of nets must be stopped where there are dolphins.

He said there should be regular checks where there are dolphins to make sure people conserve these mammals rather than harm and kill them due to their negligence or in their bid to catch fish.

"Cambodians must take pride in having dolphins on their shores and they must learn to conserve and protect them. This can only be done by getting everyone to cooperate and stop all fishing crimes and laying of fishing nets where they live in the Mekong River," said Teak.

He added that WWF-Cambodia is saddened to learn of the loss of the last river dolphin in Anlong Chheuteal, the transboundary habitat at the Laos-Cambodia border on Tuesday.

WWF-Cambodia warned and called for collective action in 2016 when the published population survey report publicly described the transboundary functional extinction when only three dolphins were left in the pool.

Scientists from the Fisheries Administration, International Union for Conservation of Nature, and WWF also issued a joint statement on the situation of this late transboundary dolphin in October last year.

Teak said documenting all the lessons learned from this tragic loss is critically important to avoid any future disappearance of other endangered species in Cambodia and in the region.

## **Wildlife Conservation Society Cambodia plans to register five new fisheries communities**

<https://www.phnompenhpost.com/national/wcs-plans-register-five-new-fisheries-communities>

"Wildlife Conservation Society (WCS) Cambodia plans to submit documents requesting the registration of five fisheries communities in Koh Kong and Preah Sihanouk provinces to the Ministry of Agriculture, Forestry and Fisheries later this month. This came after several fisheries agreements were signed and recognised by relevant authorities last week.

Som Sitha, landscape project manager at WCS Cambodia, said on February 8 that his organisation in collaboration with the Fisheries Administrations Department of Community Fisheries Development had signed the documents with five communities to manage and conserve fishery resources, especially royal turtles (*Batagur affinis*) and Siamese crocodiles (*Crocodylus siamensis*), in a sustainable manner.

Now that we have signed these agreements, we are at the final stage. We will send the documents to the agriculture ministry and get these communities registered, he said.

## **Residents along Cambodias Tonle Sap sign contract to cease electrofishing**

<https://www.khmertimeskh.com/501019890/residents-along-tonle-sap-sign-contract-to-cease-electrofishing/>

"Residents of an area in Kampong Chhnang bordering the Tonle Sap Lake in Cambodia have agreed to stop electrofishing and have turned over their equipment to the authorities, as officials continue to tackle illegal and unsustainable fishing practices. This is according to the Governor of Kampong Chhnang, Chhour Chandoeun, on February 5.

During a meeting of the Provincial Administrative Unity Command on January 30, Governor Chandoeun said that the Kampong Leng District Administrative Unity Command cooperated with professional officers of District Fisheries Administration to educate and disseminate measures to prevent the use of illegal fishing gear, especially fishing with electric fishing tackle.

Kampong Leng residents have signed a contract to stop electrofishing and hand over a total of 70 electric shock inductors.

Kampong Leng District Administrative Unity Command and other district commands are continuing to fight against illegal fishing practices throughout the province.

## **Tonle Sap Lake fish electrocution costing Cambodian govt. €~\$10,000 per day**

<https://www.phnompenhpost.com/national/tonle-sap-lake-fish-electrocution-costing-govt-10000-day>

"President of the Royal Academy of Cambodia Sok Touch called on provincial authorities around the Tonle Sap Lake and the Fisheries Administration to strengthen patrols, investigation, prevention and crackdown on people using fish electrocution devices in the Tonle Sap Lake, because this crime costs the government \$10,000 in income a night.

The call came on January 28 after he and his team arrived to inspect, investigate and prevent the encroachment on flooded forest land in areas around the Tonle Sap Lake and they found the illegal fishing occurring directly and received reports from local people about the crime of fish electrocution in the Tonle Sap Lake.

This crime of fish electrocution costs the Royal Government \$10,000 in income a night. So, the Fisheries Administration and the governors of each province around the Tonle Sap Lake have to prevent people from doing this, he said. In order to sustain the fishery resources in the Tonle Sap Lake for the benefit of the younger generations, Sok Touch was determined that he would see the arrest of those electrocuting fish in the Tonle Sap Lake to bring them to justice.

### **Cambodia's fisheries production declines 8.5% to 856K tonnes in 2021**

<https://www.phnompenhpost.com/business/fisheries-production-declines-85-856k-tonnes-2021>

"Fisheries production in Cambodia was valued at \$1,712,800,000, reaching 856,400 tonnes in 2021, down by more than 8.5 per cent from 936,300 tonnes a year earlier, according to data from the 2020 and 2021 annual fisheries reports.

Freshwater capture fisheries and aquaculture accounted for 383,050 tonnes and 348,350 tonnes, respectively, down by 7.3 per cent and 13.0 per cent from 413,200 tonnes and 400,400 tonnes in 2020.

On the contrary, marine capture fisheries represented 125,000 tonnes, up by 1.9 per cent from 122,700 tonnes in 2020. Last year's fishery exports weighed in at 3,469 tonnes, down more than three per cent from 3,590 tonnes in 2020. At the annual review meeting on the fisheries sector, Minister of Agriculture, Forestry and Fisheries Veng Sakhon said that work to promote the implementation of fisheries management laws has encountered many complex problems.

Still, he expects the Fisheries Administration (FiA) to achieve better results in 2022, through improved cooperation with stakeholders.

## **Cambodia rakes in more than \$1.7 billion from aquaculture and freshwater fisheries sector in 2021**

<https://www.khmertimeskh.com/501012780/cambodia-rakes-in-more-than-1-7-billion-from-aquaculture-and-freshwater-fisheries-sector-in-2021/>

"Cambodia saw more than \$1.7 billion in profits in the past year from the aquaculture and freshwater fishery industry, with more than 380,000 tons of yield from the freshwater fisheries. This is according to the report of the Fisheries Administration at the closing ceremony of the meeting to review the work of the fisheries sector in 2021 and the direction of implementation in 2022 on the afternoon of January 24.

According to the Fisheries Administrations report, the total yield of the aquaculture and fisheries sector in 2021 was 856,400 tons, of which 383,050 tons were freshwater, 125,000 tons were marine and 348,350 tons were aquaculture.

Export from the sector was clocked at 3,469 tons. Profits from the sector was reported to be more than \$1.713 billion.

The report continued that there are a total 516 fishing communities in the country (475 freshwater communities and 41 marine communities). The communities are equivalent to 147,518 or 332,168 people.

## **Mackerel fishing ban in Cambodia returns from January 15 to March 31**

<https://www.phnompenhpost.com/national/mackerel-fishing-ban-returns-january-15-march-31>

"The Fisheries Administration of Cambodia has issued a notice to all offshore fishermen in Cambodia that fishing for mackerel during the spawning season from January 15 to March 31 is forbidden. According to the announcement by the Fisheries Administration, as of January 15 there is a closure of fishing for mackerel fish until the new season begins March 31.

In order to contribute to the preservation and protection of sea fisheries resources, the Fisheries Administration hopes that all people engaged in fishing for mackerel will stop this type of fishing from January 15 to March 31, Fisheries Administration director-general Pum Sotha underlined in the announcement.

However, fishermen are still able to continue fishing for marine animals such as crabs, squid, prawns and other species of fish to support their families, according to director of Preah Sihanouk provincial Fisheries Administration Em Phea on January 18. We ban fishing for mackerel, but apart from that species we do not ban sea fishermen from fishing, they can proceed as usual, he said.

Phea said that in 2021 the total catch from sea fishing was more than 47,500 tonnes a decrease of 50 tonnes compared to 2020.

### **Cambodian company dips into marine fish farming on pair of P Sihanouk islands**

<https://www.phnompenhpost.com/business/firm-dips-marine-fish-farming-pair-p-sihanouk-islands>

Jin Yu Tang (Cambodia) Fishery Co Ltd plans to splash out an unspecified amount on “marine fish aquaculture in submerged cages”, on Preah Sihanouk province’s Koh Dek Koul and Koh Thas islands, according to Minister of Agriculture, Forestry and Fisheries Veng Sakhon on January 11.

The minister wrote in a Facebook post that he had discussed the project – set to cover a surface area of 1,984ha in Phase I – at the ministry earlier that day with a company representative, whom he identified only as “Ms Jessica”.

Sakhon said the undertaking would be invaluable for the development of the Cambodian fisheries sector: creating jobs for locals, increasing the number of fish at sea, and shoring up marine aquaculture production to meet local demand.

The minister said he had directed Jin Yu Tang – with a name meaning “enter the jade hall” – to submit an environmental and social impact assessment (ESIA) report and supporting documents for the project to the ministry.

However, the company must first get the nod from the Council for the Development of Cambodia (CDC) before it can sign an agreement with the ministry, and set the project in motion, he pointed out.

Sakhon confirmed to The Post on January 11 that his ministry had granted in-principle approval to the venture and asked Jin Yu Tang to file to the Ministry of Environment the necessary paperwork on the potential impact of the fish raising entailed in the project.

He said the environment ministry has since received the documents, although he hinted that the company had been obliged to make some adjustments.

Underlining the general importance of respecting Cambodian laws during the project approval process, he explained that companies must apply for the appropriate licences from the CDC and obtain other relevant government permits and approvals.

The undertaking would be the first of its kind at this scale, he said, noting that marine aquaculture had historically been practised solely by a few fishing communities in estuaries and along the seashore.

In contrast, Vietnam and the Chinese island province of Hainan are major producers and exporters of both freshwater and marine aquaculture products, he remarked.

“The [agriculture] ministry has only just received the company’s investment proposal. We haven’t really had other investors taking much of an interest in marine aquaculture here in Cambodia, though there are tonnes of similar enterprises in other countries,” Sakhon said.

“This is a special consideration to keep in mind that could benefit Cambodia’s economy down the road.”

At the meeting with the minister, “Ms Jessica” voiced appreciation to the minister, relevant ministries and technical officials for their guidance, insight and other support during the studies and discussions for the project since Jin Yu Tang penned a memorandum of understanding (MoU) with the agriculture ministry on January 31, 2017, according to the Facebook post.

The company representative also reported “spectacular results” from the ESIA process, and commented that the relevant authorities had labelled Koh Thas as the most suitable and potentially valuable area for the project.

Koh Dek Koul and Koh Thas islands are just west of Sihanoukville beyond Koh Puos, or Snake island.

The company was established as a joint venture between Jin Yu Tang (Shenzhen) Fishery Co Ltd and Khmer First Investment Holding Group Co Ltd with registered capital of \$10 million, according to Hong Kong-listed China Ocean Group Development Ltd.

In December 2016, the publicly-traded group – then known as China Ocean Fishing Holdings Ltd – acquired Jin Yu Tang Shenzhen, financial news website MarketScreener noted in a post.

On its home page, China Ocean Group Development says that it is incorporated in Bermuda with limited liability, and that its subsidiaries are mainly engaged in distant-water fishing, aquaculture, fisheries trade, aquatic product processing, scientific research and technological services.

And as for Khmer First Holding, the Chinese state-backed China Daily Asia Pacific Bureau describes it as “a Phnom Penh-based Chinese conglomerate of mining, finance and media”.

The Ministry of Commerce’s business registry shows that Jin Yu Tang Cambodia was incorporated on January 13, 2017 (just 18 days before the MoU signing). Online database OpenCorporates confirms Jin Yu Tang Shenzhen and Khmer First Holding as shareholders, listing only “Cao Yunde” as a director or officer of the latter.

**Cambodia’s Fisheries Administration urges people to increase processing of fishery products to increase household economy**

<https://www.khmertimeskh.com/501000931/fisheries-administration-urges-people-to-increase-processing-of-fishery-products-to-increase-household-economy/>

The Fisheries Administration has urged people to increase the processing of fishery products to increase the family economy, while the processed products fetch a higher price and have a high market.

Pum Sotha, the Royal Government Delegate in charge of the Fisheries Administration, said that the processing of fishery products, both aquaculture and fresh water, is a necessary factor in boosting the national economy as well as the economy of local people because processed products better proces.

There are many markets, both domestic and export for processed fisheries product. Sotha continued that after fishing or cultivation of fish, if people were to sell immediately, it is not expensive, but if they knew how to process those fish into dried fish, smoked fish, prahok, dried shrimp, etc., the price is high, especially with long-lasting storage, especially with more competition to overseas markets.

“Regarding the processing of fishery products, after we catch or raise them, we need to process, and this processing is very important for good quality and safety, and we also need to compete in the market. Like the catch that comes if we sell it directly, the original price will be cheaper but if we process it, it becomes more expensive.”

He stressed that the export of processed fishery products is also competitive in neighbouring countries and if people process well, high quality in line with the market requirements, the price is even more expensive when sold to foreign markets.

It should be noted that fishery products in 2021 include: Freshwater products decreased by 7.30%, leading to a total volume of 383,052 tons in 2021. Seafood production increased by 1.87%, bringing the total annual volume to 2021 to 125,000 tons. Aquaculture production decreased by 13%, bringing the total annual volume to 2021 to 348,348 tons.

Phnom Penh: The Fisheries Administration urges people to increase the processing of fishery products to increase the family economy, while the processed products are expensive and have a high market.

His Excellency Pum Sotha, the Royal Government Delegate in charge of the Fisheries Administration, said that the processing of fishery products, both aquaculture and fisheries, is a necessary factor in boosting the national economy as well as the economy of local people because processed products are expensive. There are many markets, both domestic and export. His Excellency continued that after fishing or raising, if people sell immediately, it is not expensive, but if they know how to process those fish into dried fish, smoked fish, smoked fish,

prahok, dried shrimp, etc., the price is high. Long-lasting storage, especially with more competition to overseas markets.

Voice: “Regarding the processing of fishery products, after we can catch or raise them, we need to process, and this processing is very important for good quality and safety, and we also need to compete in the market. “Like the catch that comes if we sell it directly, the original price will be cheaper if we go to process it more expensive.”

He stressed that the processing of fishery products is also competitive to neighboring countries, if people process well, high quality in line with the market, the price is even more expensive when sold to foreign markets.

It should be noted that fishery products in 2021 include: Freshwater products decreased by 7.30%, leading to a total volume of 383,052 tons in 2021. Seafood production increased by 1.87%, bringing the total annual volume to 2021 to 125,000 tons. Aquaculture production decreased by 13%, bringing the total annual volume to 2021 to 348,348 tons.

### **Cambodia in talks for WTO fisheries subsidies pact**

<https://www.phnompenhpost.com/business/kingdom-talks-wto-fisheries-subsidies-pact>

"Officials at Cambodia's World Trade Organisation (WTO) mission in Geneva, Switzerland are negotiating a draft agreement on fisheries subsidies with counterparts from around the world. Based on the mandate laid out in Goal 14.6 of the 2030 Sustainable Development Agenda, negotiators are tasked with securing agreement on disciplines to reallocate subsidies so as to reduce illegal, unreported and unregulated fishing, overcapacity and overfishing, with a strong emphasis on vulnerable species, ambassador Long Kemvichet explained.

The Cambodian mission seeks to ensure that the provisions of the latest version of the agreement nonetheless adequately support growth in the Kingdom's fisheries sector and drive exports, he told a virtual briefing. Negotiations on fisheries subsidies disciplines began at the WTO in 2001, and resolving the remaining differences are key to achieving success at the UN agency's upcoming 12th Ministerial Conference (MC12), which was rescheduled from December 2021 to an as-of-yet undetermined date later this year, he underlined.

Colombia's WTO ambassador Santiago Wills, chair of the fisheries subsidies talks, submitted the previous version of the draft agreement to ministers on November 24, the UN agency said in a statement, noting that provisions in the text remain open for discussion.

Kemvichet issued a general call for relevant officials to work well with the mission on these and other negotiations at the WTO and similar organisations, including on topics such as small- and



medium-sized enterprises, the environment, agriculture and investment, which require internal coordination among relevant ministries to take full advantage for the nation.

The Post could not reach Pum Sotha, director of the Fisheries Administration under the Ministry of Agriculture, Forestry and Fisheries, for comment by press time.

Royal Academy of Cambodia economics researcher Ky Sereyvath told The Post that the draft agreement on fisheries subsidies is designed to encourage Cambodians to export more fish to WTO member countries.

The economist believes that the agreement will guide government subsidy policies and programmes to allow fish production and conservation to flourish, and alleviate poverty.

He noted that the bulk of fisheries subsidies end up going to tycoons with improved breeding protocols, and that small-scale operations that follow more conventional practices tend to be less productive.

To counter this tendency, Sereyvath suggested the government provide technical training to farmers, which he said would spur fisheries exports.

### **Lower water levels in Cambodia drag fisheries yield down for 2021**

<https://www.khmertimeskh.com/50996723/lower-water-levels-drag-fisheries-yield-down-for-2021/>

Lower water levels than previous years and illegal fishing are the main factors driving the reduction in the yield of fisheries lakes and rivers this year, said officials and key insiders.

Figures from the Fisheries Administration at the Ministry of Agriculture showed that the fisheries yield – freshwater fish, maritime fish, and farmed fish amounted to 856,400 tonnes, a year-on-year decrease of 8.5 percent.

The fisheries yield this year declined due to a number of factors, including climate change, and especially low water levels that made it impossible for fish to spawn in the numbers they had previously, Pum Sotha, director of the Fisheries Administration, said yesterday.

“The water levels in the Tonle Sap Lake and the Mekong River are low, with the effects of climate change exacerbating the reduction of water levels in lakes and rivers this year. This has caused a reduction in the size of the fish population, as well as the average size of each individual fish that was caught,” Sotha said.

The total tonnage of freshwater caught was 383,052, with maritime species yielding 125,000 tonnes. There were 348,348 tonnes of farmed fish harvested, according to the Fisheries Administration report.

Besides the low water levels, the conservation of fish resources is an important area of understanding that the Fisheries Administration must continue to disseminate widely to fishermen widely to encourage and educate them on the importance of maintaining the conservation of flooded forests, which are important habitats for fish spawning and biodiversity, he said.

Fisheries Action Coalition Team's Tonle Sap project coordinator Minh Bunly shared the same sentiment.

The declining fish yield this year is due to illegal fishing activities, climate change, and construction of dams upstream of the Mekong River, which do not allow sufficient water levels for fish-breeding, Bunly said yesterday.

"Observations from our working team shows that the freshwater fish yield declined this year and our figures are similar to those in the (ministry) report," Bunly said.

Encroachment of flooded forest land is also a factor in the decline, he said.

The government has recently reclaimed encroached flooded forest land in six provinces surrounding the Tonle Sap lake.

The fish population is expected to increase once large amounts of flooded forest land have been freed from encroachment, Bunly said.

"We expect that fish yield will increase, but it will not happen quickly, because floodlands will take between three and five years to regrow to the point that they can provide an ideal breeding environment for fish stocks. If the water level reductions caused by climate change are addressed, there will not be enough water to regrow the flood forests," Bunly said.

### **Fishing crimes decline in Cambodia's Prey Veng after netting of multiple perpetrators**

<https://www.khmertimeskh.com/50993429/fishing-crimes-sees-decline-in-prey-veng-after-netting-of-multiple-perpetrators/>

"Authorities in the Cambodian province of Prey Veng say that there has been a recent decrease in illegal fishing methods such as electro-fishing, while fishing with illegal nets remains a problem. The Director of Prey Veng Provincial Fisheries Administration, Oun Sinath, told local news on December 22 that at the moment there is a decrease in fishing crimes after multiple arrests, but the crackdown on those involved with illegal fishing practices continues.

The Director said that the suppression of fishing crimes is stunted due to the lack of personnel in each district. The fishery administration cannot do it alone he pointed out. According to the Director, the crackdown was able to be conducted due to the cooperation of the fishing community, the provincial courts, and especially the armed forces and local authorities."

Director Sinath said that the fishing area of Prey Veng is large and the fishery force is limited to what they can do and require the assistance of community forces and armed forces to catch perpetrators. The operation also requires the coordination of the provincial court.

Law enforcement officers also cracked down on fishing crimes at the conservation area in Anlong Kul Fisheries, Peam Meanchey Commune, Peam Rok District, and have filed a case at the provincial court.

### **Illegal fishing continues in Tonle Sap Lake, Cambodia**

<https://www.khmertimeskh.com/50967077/illegal-fishing-continues/>

"The Tonle Sap Lake and River in Cambodia are open for legal fishing, but some fishermen continue to use illegal methods without any fear of getting caught, said the Siem Reap Fishery Administration yesterday.

Administration director Chan Tong told Khmer Times: We are working very hard to stop illegal fishing along the Tonle Sap Lake because bad fishermen do not fear our authorities. They still commit illegal fishing activities. Most illegal equipment is used at night like fishing with nets which are not allowed by the fishery law. It is a crime, said Tong, adding that it must be stopped or it will endanger the fish.

Tonle Sap Fisheries Action Coalition Team programme coordinator Minh Bunly said that joint efforts by police, military police and fishery officers haven't solved the problem.

Eang Nam, head of the Boeng Be fishing community in Kampong Cham province's Kang Meas district, said yesterday: "If we all catch fish in a traditional way then we won't have a problem of less fish in the future."

### **EU Delegation and Cambodia's Ministry of Agriculture announces launch of Tonle Sap fishing community and coastal provinces support projects**

<https://www.khmertimeskh.com/50960232/eu-delegation-and-ministry-of-agriculture-announces-launch-of-tonle-sap-fishing-community-and-coastal-provinces-support-projects/>

"Four EU-funded projects toward the support of the fishing communities in 10 Tonle Sap Biosphere Reserve and coastal provinces in Cambodia were officially launched. The EU Delegation to Cambodia and the Ministry of Agriculture, Forestry and Fisheries (MAFF) formally announced the launch of the four EU-funded projects on October 27. The announcement was made in a joint virtual workshop.

According to the Head of Cooperation at the EU Delegation to Cambodia, Bryan Fornari, the launch of the projects is an important stepping stone to the Covid-19 recovery plan in the region.

The projects are aimed at supporting green growth, job creation, social services, and better protection of natural resources for the fishing communities in 10 Tonle Sap Biosphere Reserve and coastal provinces.

If successful, the projects could bring in new economic opportunities and improved living standards for over 50,000 people."

As with the most countries, the pandemic has caused Cambodia a great deal in employment numbers, but the new jobs that would be created by the projects will contribute towards remedying some of the declining numbers of employed civilians.

### **Panel urges protection of Mekong fish stocks**

<https://www.ucanews.com/news/panel-urges-protection-of-mekong-fish-stocks/94612#>

The Mekong River Commission (MRC) today released two reports recommending the protection of fish stocks to ensure food supplies for millions of people in Cambodia, Laos, Thailand and Vietnam.

Around 65 million people rely on the Mekong for their chief source of protein and live hand to mouth, but climate change, drought, dam construction in Laos and China and illegal fishing have resulted in sharply lower fish catches.

The reports — Status and Trends of Fish Abundance and Diversity in the Lower Mekong Basin during 2007–2018 (FADM) and Social Impact Monitoring and Vulnerability Assessment 2018 (SIMVA 2018) — found people continue to rely on water resources that are increasingly under pressure.

“These studies further highlight the importance of responsible development, balanced regional and national interest, and stronger regional cooperation in order to safeguard the Mekong River water and related resources,” said MRC secretariat chief executive An Pich Hatda.

Adverse changes in water resources, which include agriculture, aquaculture, fish, other aquatic animals and plants, are affecting incomes, with around 22 percent of households indicating they had been impacted by these issues.

According to the SIMVA 2018, 35 percent of 2,800 surveyed households said their income was lower, 32 percent said it was the same and only 26 percent said that their income increased slightly, while 6 percent indicated that their income increased significantly compared to 2013.

The 138-page long FADM is the first ever large-scale study to consider both spatial and temporal variations of fish abundance and diversity in the Lower Mekong Basin (LMB) using the MRC's long-term fisheries monitoring data.

The MRC said the study established that fishing communities in almost all zones of the LMB were disturbed. In Laos and Vietnam, catch rates declined at two of four and three of five stations surveyed respectively.

Among its other findings, the SIMVA 2018 survey revealed that the percentage of households engaging in fishing fell across the region from 50 percent in 2014 to about 37 percent in 2018.

It said this was due in part to reduction in fish catches and partly to growth in other economic opportunities and livelihoods diversification.

The reports also found that gender inequality was also an important factor stoking societal vulnerabilities. Traditional gender roles were prevalent in "many areas of the LMB corridor" with major disparities in employment and pay between women and men.

It said female-headed households were particularly exposed as they were also single-parent households. The survey found 19 percent of households were headed by females and 81 percent by males.

As part of broader recommendations, the study urged governments to enforce fisheries laws and jointly implement the approved Mekong Basin-wide Fisheries Management and Development Strategy to restore distressed fishing communities.

It also further proposes integrating river management plans to address risks from increasing hydropower development.

### **Cambodia: Climate change, Mekong dams threaten world's biggest inland fishery**

<https://www.dw.com/en/cambodia-climate-change-mekong-dams-threaten-worlds-biggest-inland-fishery/a-59274218>

"Water levels in Cambodia's Tonle Sap hit historic lows for the third year in a row at the end of August, according to the Mekong Dam Monitor, a cooperative effort by the Washington-based Stimson Center and Eyes on Earth.

Though levels have started to creep up in the past week, they remain far below what they should be at this time of the year. Tonle Sap — Southeast Asia's largest fresh water lake — ought to be full of water and fish.

"Once again, the Mekong's wet season is experiencing anomalously low levels of rainfall," Brian Eyler, director of the Southeast Asia program at the Stimson Center, told DW.

"To make things worse, data shows upstream dams are restricting as much water as they would hold back during a normal wet season," Eyler said.

"Regardless of how much rain falls during the wet season, upstream dam restrictions are devastating for the Mekong's ecological processes and the natural resources that come from the river upon which tens of millions rely," he added.

Since early July, over 12 billion cubic meters (420 billion cubic feet) of water have been withheld by 45 upstream dams, according to the Mekong Dam Monitor.

### Climate change 'disrupting' Mekong

Every year during the June-October monsoon season, the Mekong river floods and reverses the flow of the Tonle Sap, replenishing the lake and drawing bountiful fish stocks into the lake system.

But lately this natural cycle has been delayed, hampering local farming and destroying fisheries.

"The recurring pattern of record lows in the Tonle Sap and parts of the Mekong basin over the past few years shows that Mekong is in crisis," Pianporn Deetes, campaigns director at International Rivers, a conservation NGO, told DW.

"Climate change and large-scale dams are disrupting the timing and size of floods during the wet seasons, which are critical to sustaining the health of the Tonle Sap and the Mekong basin and the lives and livelihoods of millions of people," she added.

Marc Goichot, WWF's lead for freshwater in the Asia-Pacific region, attributes the cause of record-low water levels to several factors, including changes of land use and changes in rainfall patterns brought about by the climate crisis. He also said the riverbed of the Mekong is losing elevation due to the combined effect of reservoirs behind dams trapping sediment and sand mining.

### Regional food security at risk

Experts are concerned about the critical situation of an ecosystem vital to the lower Mekong river basin.

Seasonal inundations influenced by the Mekong River play a major role in Tonle Sap's fisheries, Taber Hand, director of the NGO Wetlands Work, told DW. They bring sediment-rich water which boosts microbial and fish production, as well as help reset the ecological system and maintains overall fish levels.

"The Mekong's flood pulse brings water that inundates the huge floodplain making it a 'wetland bouillabaisse,'" he said. "It is all about the flood pulse. Change it and everything else changes."

According to Eyler, the annual flood pulse is needed to keep Tonle Sap functioning as the world's largest inland fishery and to keep it providing nourishment to Cambodians, who derive up to 70% of their animal protein intake from the lake.

Without the wet season's high water levels, the lake's fish population drastically decreases and so does the annual catch.

"Many of those fish leave the lake at various times of the year to migrate to other parts of the Mekong in Thailand, Laos and Vietnam, so a weak Tonle Sap is bad for regional food security outcomes," Eyler said.

### Impact of Chinese dams

Though rapidly shifting climate conditions play a major role in Tonle Sap's hardships, Deetes says dams built across the Mekong bear major responsibility for low water levels.

"Large-scale dams on the Upper Mekong in China and key tributaries in the Lower Mekong are a main cause of the damage," Deetes said.

"They withhold much-needed water during the wet season, reduce the flow of vital sediments and nutrients, and are cutting and isolating the Mekong into multiple pieces, which is having major detrimental impacts on the health of the Mekong and Tonle Sap," she added.

Susanne Schmeier, an associate professor of Water Law and Diplomacy at IHE Delft, said that, though the dams have contributed to the problem, their limited storage capacity — and the fact that less than a fifth of the water in the Mekong lower basin comes from China — means that Tonle Sap's low water levels cannot "exclusively" be blamed on Chinese dams.

Though Beijing has pledged to share more water data, river campaigners are demanding more action to address the crisis, both from China and downstream countries, which have also been accused of taking insufficient action.

"We see that there are agreements and promises from China to share information, but this is insufficient," Deetes said.

"Someone telling us they're turning on or off the tap is not helpful. The Mekong and its people need natural and ecological flow in order to sustain the natural services," she added.

### **US set to fund aquaculture development in Cambodia**

<https://www.khmertimeskh.com/50938731/united-states-set-to-fund-aquaculture-development/>

The United States Department of Agriculture (USDA) is to fund a major aquaculture development project as part of the US government international food security support programme called the Commercialisation of Aquaculture for Sustainable Trade (CAST).

CAST is a project to accelerate production of high-demand fish species for the Cambodian market and will develop a lasting aquaculture industry and promote Cambodian-raised fish. It will strengthen local production of high quality fish food and build a profitable market system for aquaculture products. Through CAST Cambodia's private sector and universities are to work closely with US soybean growers and businesses as well as academic institutions and nongovernmental organisations.

The American Chamber of Commerce (Amcham) in Cambodia held a webinar yesterday on several topics including CAST where James Hershey, chief of party of CAST, said: "One of the main focuses will be on the teaching of the 600 commercial fish farmers selected to transport the fish safely: for example not transport fish at mid-day and, if you have to, transport them in shade. He added: "We have already provided a 50 page manual to these fish farmers as a guideline to follow."

He added: "CAST will also support everyone from the fish collectors, wholesalers, processors right the way to the hotel/restaurant/cafe (HORECA)."

The agricultural sector in Cambodia accounts for 22 percent of its gross domestic product (GDP) and employs 3 million people, so is critically important to the overall success of the economy.

Aquaculture is the production of aquatic organisms under controlled conditions (i.e. fish and shrimp farms) throughout part or all of their lifecycle. Its development can help meet future food needs and ease burdens on natural resources.

CAST, which is part of the USDA's food for progress programme, is aimed at increasing the scale and scope of freshwater aquaculture in Cambodia by accelerating improvements in management, feed and other inputs.

Anthony Galliano, president of Amcham, told Khmer Times yesterday: "The importance and the growth potential of the United States and Cambodian bilateral trade relationship at times is not given recognition and prominence. The United States is the second largest importer of agricultural products by country and can be a huge opportunity for the Kingdom. I am very proud of CAST Project, which is US- government funded to the tune of \$17 million, targeted at the growth and development of freshwater aquaculture.

"The fisheries sector plays a crucial role in the economy of the country, employing 6 million people in fisheries or fisheries-related activities. Fishery products represent about 10 percent of gross domestic product. The value of the industry is approximately \$1.5 billion per year.

"There is rightfully so a more prominent focus on trade and foreign direct investment. However, this is a development project to support eventual fishery independence and elevate Cambodia into a major exporting nation of fish products."

**Cambodia's China-funded mega dam linked to rights abuses and loss of fisheries**



<https://globalvoices.org/2021/08/25/cambodias-china-funded-mega-dam-linked-to-rights-abuses-and-loss-of-fisheries/>

A recent report by Human Rights Watch (HRW) has highlighted the negative social and environmental impact of the Lower Sesan 2 hydroelectric dam in northeastern Cambodia.

The dam, located in the Mekong River Basin, was built as part of China's Belt and Road Initiative (BRI) with a budget of approximately 800 million US dollars. It opened in 2018, and its main operator is China's Huaneng Group.

The dam is a major BRI project in Cambodia, reflecting the close relationship between China and Cambodia's prime minister Hun Sen, who has ruled the country for more than three decades. Journalists in Cambodia said they have encountered difficulties accessing information about BRI projects.

The 137-page HRW report titled "Underwater: Human Rights Impacts of a China Belt and Road Project in Cambodia" was released on August 10, 2021. The research started in 2019 and involved interviews with more than 60 community members, civil society leaders, academics, scientists, and other project stakeholders.

The report states that around 4,500 to 5,000 houses belonging to villagers near Sesan and Srepok Rivers were submerged due to the dam. It identified Indigenous groups and other ethnic minorities affected by the project, including the Bunong, Brao, Kuoy, Lao, Jarai, Kreung, Kavet, Tampuan, and Kachok communities.

HRW said the Cambodian government and its Chinese partner have failed to provide safeguards or properly compensate residents who were forced to leave their communities. HRW quoted a Bunong villager saying.

The dam also severed traditional migratory routes of fish in the Mekong River. HRW's Asia advocacy director John Sifton summarized the destructive impact of the dam.

#### Government response

Responding to the HRW report, government spokesman Phay Siphon insisted that the dam is beneficial to Cambodians.

He added that through the project, aid was extended to affected communities, and included 118 houses, 471 wooden houses, 127 self-construction budgets, 63 ponds, 12 schools, 12 kindergartens, two commune halls, three pagodas, two police stations, a military post, and 181 water wells in new settlements.

Environment Ministry spokesman Neth Pheaktra emphasized that many Cambodians support the dam project because it addresses the country's demand for renewable energy sources.

Suos Yara, a member of the National Assembly, accused HRW of having “naked political bias, and dubious research methodology.” He wrote that the people interviewed by HRW do not represent the views of the majority of local residents affected by the project.

His comments were republished by the Chinese state media outlet Global Times.

The response of Cambodian authorities was echoed by various agencies. Even the Cambodian Embassy in Turkey has released a statement about the HRW report.

Early reports about the dam

The HRW report confirmed what many groups and campaigners have been saying about the dam for many years. Residents and activists have been protesting about the project since 2017.

Khmer refers to the ethnic majority in Cambodia.

There were reports about the hardships experienced by residents forced to leave their flooded ancestral lands two years after the dam completion. Even relocation sites were flooded, and settlers blamed the dam for causing a shortage of clean water.

Writer Horn Chanvoitey also probed the supposed benefits of the dam and the promises made by Cambodian officials to local communities.

### **Partnership for Forestry and Fishery Communities in Cambodia (PaFF) helps thousands in rural areas**

<https://www.phnompenhpost.com/national/paff-helps-thousands-rural-areas>

Tens of thousands of rural Cambodians have been empowered to exercise their rights to manage, protect and benefit from local natural resources thanks to an eight-year initiative with the Partnership for Forestry and Fishery Communities in Cambodia (PaFF), according to their press release.

The third and final phase of PaFF was launched on August 19, with \$6.2 million in funding from the Swiss Agency for Development and Cooperation and the Swedish International Development Cooperation Agency.

The third phase focuses on building capacity in communities and government agencies to implement three approaches to sustainable natural resource management including community forestry, community fisheries and community-protected areas.

The programme also seeks to strengthen democratic processes, promote the rule of law, and safeguard the human rights of women, indigenous groups, and low-income community members through their engagement in community based natural resource management, according to the statement.

PaFF would continue to be implemented in Kratie, Stung Treng, Kampong Thom and Preah Vihear provinces by four partners: Regional Community Forestry Training Centre (RECOFTC), Non-Timber Forest Products Exchange Programme Asia, World Wide Fund for Nature (WWF-Cambodia) and the Culture and Environment Preservation Association.

It supports communities that are formalising their tenure over local forest and fisheries resources, engaging with authorities, implementing management plans, improving production practices and provides greater access to finance.

According to the group, the programme supported some 44,600 people who depend on community forests and fisheries for their livelihoods during its first two phases from November 2014 to June this year.

It helped 60 communities to formalise their rights over local forests and fisheries, and supported 134 communities in the development and implementation of management plans for these resources.

Seng Teak, country director of WWF-Cambodia, which led the implementation of PaFF's Phase 2 between 2017 and 2021, said empowering communities by strengthening the capacity and resources they need to make decisions about, manage and use their natural resources should be the way forward.

“In doing so, we promote local ownership and support long-lasting livelihood development and biodiversity conservation,” he said.

The programme, which is set to end in June 2023, aims to support the implementation of management plans for 113 community forests, 24 community fisheries and five community protected areas totalling 159,767ha and benefitting 60,926 people in 24,647 households.

RECOFTC country director Hou Kalyan said that when the communities have secure rights over their natural resources, those resources can be managed in a more transparent, fair, accountable and equitable way, leading to long-term sustainability.

“Ultimately, PaFF will benefit tens of thousands of rural Cambodians in line with the government's policy goals, including international commitments on climate change and biodiversity and progress towards the UN Sustainable Development Goals,” she said.

### **Cambodian dam a disaster for local communities, rights group says**

<https://news.mongabay.com/2021/08/cambodian-dam-a-disaster-for-local-communities-rights-group-says/>

The Lower Sesan 2 hydroelectric scheme was completed in northeast Cambodia in 2018. The reservoir flooded 300 square kilometers (116 square miles) upstream of the confluence of the

Sesan and Srepok rivers, two tributaries of the Mekong. Villages, places of worship, ancestral burial grounds and forests were submerged, and nearly 5,000 people were displaced.

A recent report from U.S.-based advocacy group Human Rights Watch last week assessed the impact of the Chinese-financed project as a human rights “disaster” for the communities that lost their homes and livelihoods.

“The Lower Sesan 2 dam washed away the livelihoods of Indigenous and ethnic minority communities who previously lived communally and mostly self-sufficiently from fishing, forest-gathering, and agriculture,” John Sifton, HRW Asia advocacy director said in a statement.

The villages of Bunong, Kuoy, Lao, Jarai, Kreung and Tampuon minorities were permanently flooded to make way for the dam’s reservoir. The project “profoundly harmed local communities, leaving them poorer and worse off,” says the report, which cites interviews conducted over two years with 60 community members, civil society leaders, academics, scientists and researchers. “It has caused massive damage to the ecology of rivers upstream and downstream of the project, resulting in major losses in fisheries populations.”

Prior to completion, fisheries experts had warned that damming the confluence of the rivers would threaten fish stocks and fragile farming ecosystems on which millions living along the Mekong’s course depend. A 2012 study in the Proceedings of the National Academy of Sciences said fish stocks were expected to drop by more than 9% across the Mekong Basin as a result of the project.

The impact on fisheries is significant, since the Mekong River accounts for one-fifth of the world’s freshwater fish catch, providing dietary protein for tens of millions of people in mainland Southeast Asia.

The 400-megawatt Lower Sesan 2 dam is the largest in Cambodia and part of China’s Belt and Road Initiative (BRI), a massive multinational infrastructure project begun under President Xi Jinping in 2013. The reportedly \$800 million hydropower project was funded by Chinese banks and built by China Huaneng Group, a state-owned electricity company that holds the majority stake and also operates the scheme. Other investors include Cambodia’s Royal Group and Vietnam’s state-owned electricity company, EVN.

Concerns largely ignored

Like many other BRI projects, the Lower Sesan 2 dam has provoked controversy over lack of transparency, disregard for community concerns, and negative environmental impacts.

According to HRW, the Cambodian authorities and private companies involved failed to consult affected communities adequately and to obtain their free, prior and informed consent, as specified in the U.N. Declaration on the Rights of Indigenous Peoples.

“The company didn’t consider Indigenous rights,” one Bunong villager told HRW. “They just told us to move.”

Throughout the project’s construction, community members raised appeals to Cambodian authorities, but were “largely ignored.” Objectors were subject to intimidation, “threatened or even jailed,” the HRW report said.

The communities living in the pathway of the dam were not just worried about saving the river and fish populations; they wanted to preserve their cultures, sacred forests and ancestral grounds.

“Rivers create a lot of culture, including our annual boat festivals, the ancient belief in water spirits, Buddhist water blessings, and the national diet,” Meach Mean, the founder and director of 3S Rivers Protection Network, a grassroots organization that campaigned with local communities to oppose the project, told Mongabay in 2017. “If the dam is built it will stop our culture, not just our fish.”

Despite widespread local opposition, the Cambodian government pushed ahead with the project, which aims to generate about one-sixth of the country’s electricity needs. But production levels are “likely far lower, amounting to only a third of those levels,” the HRW report said.

Furthermore, the environmental benefits of the hydropower scheme have been called into question. A 2017 study in *Environmental Research Letters* estimates that the project has a carbon dioxide emission rate per megawatt hour comparable to natural gas plants, in part due to decomposing vegetative matter submerged by the vast reservoir.

As the development proceeded, people who were moved to make way for the dam were “coerced into accepting inadequate compensation” and provided with poor housing and land ill-suited to farming at resettlement sites, the report says. Nor were they provided with training in other ways to earn a living.

However, Cambodian authorities deny that villagers have been adversely impacted. “The indigenous and minority communities will share the benefit of these developments,” Siphon Phay, a government spokesman, told the *Financial Times*. “Their livelihoods will be integrated into main society — health, education and other norms of modern ways of life.”

The project’s detrimental effects can still be addressed, said the report, through new compensation assessments and provision of services and training for affected communities.

“Cambodian authorities need to urgently revisit this project’s compensation, resettlement, and livelihood-restoration methods, and ensure that future projects don’t feature similar abuses,” Sifton said, adding that the government “needs to reform its laws to require meaningful impact assessments for development projects.”

## Rivers increasingly under threat

The HRW report highlights wider concerns over the dam-building activities of China's BRI project, which has more than 10 large Chinese hydropower projects underway or completed in countries across Asia and Africa.

"There is no evidence that the Chinese government ever imposed any obligations on the Chinese and Cambodian companies who built the dam to follow international and corporate social responsibility standards or provide adequate compensation for harms the project caused, or even standards that would apply had the dam been built in China," the HRW report concludes.

London-based watchdog, the Business and Human Rights Resource Centre (BHRRC), which monitors company-linked human rights abuses worldwide, last week shed more light on the consequences of China's BRI scheme for marginalized communities. According to the BHRRC report, nearly one-third of alleged human rights abuses committed between 2013 and 2020 took place in Southeast Asia, with many of the allegations linked to Chinese ventures in metalworks, mining, fossil fuels and construction.

Meanwhile, a recent study in Global Sustainability says that free-flowing rivers are increasingly under threat from hydropower developments worldwide. Dams and reservoirs are the leading cause of loss of watercourse connectivity. The study found that all proposed dams on free-flowing rivers would collectively generate less than 2% of the renewable energy needed by 2050 to keep global temperature increase below 1.5o Celsius (2.7° Fahrenheit). The authors say this spotlights the trade-off between hydropower and maintaining healthy freshwater ecosystems.

"Rivers are powerful agents for keeping wildlife and communities healthy, especially in a warming climate, yet their ability to support life is threatened by hydropower dams in many parts of the world," Michele Thieme, lead freshwater scientist at WWF and lead author of the study, said in a statement. "The best policy solutions will be those that balance renewable energy needs with the many benefits of thriving freshwater ecosystems."

## **Migrant workers on fishing boats in Cambodia to know their rights**

<https://www.khmertimeskh.com/50914933/migrant-workers-on-fishing-boats-to-know-their-rights/>

"The National Committee for Counter Trafficking (NCCT) on Wednesday attended an online meeting hosted by the International Organization for Migration (IOM) to discuss a project benefiting migrant workers on fishing boats by increasing their access to rights and services, direct assistance and accurate information.

Participants of the Discussion on Development of the Regional Plan to Achieve Ship to Shore included the United Nations Development Programme (UNDP) and the International Labour Organization (ILO) as well as representatives from several other countries.

The main problem of concern for Cambodia is that migrant workers on fishing boats are often trapped by brokers who trafficked them to work in international waters such as South Africa and Papua New Guinea without realising where they have been taken. NCCT vice-chairwoman Chou Bun Eng told Khmer Times yesterday: We have this project to help Cambodian workers on fishing boats in international seas.

It's difficult for us to know what problems they are facing in the workplace because many of the workers in the fisheries sector on boats in international waters are very far away, so it is hard to know what their challenges are, said Bun Eng. She said that direct assistance can only occur if the workers report their situation to authorities or NGOs.

I just want to appeal to those countries like Thailand, Malaysia and Indonesia because they have the benefit of billions of dollars, but Cambodian workers have no money when they finish working and return, said Bun Eng. Many Cambodian workers are hired by brokers to work on fishing boats in Thailand's Rayong province but some of them end up in other countries like Malaysia, Indonesia and South Africa.

Chea Chum, a fisherman from Battambang, said that the first time a broker told him he could get more money by working on a boat to catch fish in deep sea water, he believed the broker. When he started the job, it was not like he was told. It was totally different. I had to work very hard and got no pay or time for breaks. We never went to shore, said Chum.

Chan Mao, a worker from Prey Veng province, said that he was cheated by local brokers who sold him to fishing boat owners somewhere in Indonesia. I never had time to come back to land and the boss didn't pay me, he said.

Working conditions were very hard and there was no one to tell what many workers faced like not enough food, sickness or not being paid. Official documents (identification) were kept by the boss, said Mao. Bun Eng said: Authorities have arrested brokers and sent them to jail if they sell Cambodians. In the past, if the brokers are arrested here, we send them to trial here."

According to a report by Labour Rights Promotion Network Foundation (LPN) in Thailand, seven out of 10 fishermen in Thailand show indications of forced labour.

LPN founder and executive director Sampong Srakaew told Khmer Times yesterday that he is working very closely with migrant workers from Cambodia, Laos and Myanmar. He said he always assists them if they have any problems or need help.

“Sometimes it’s hard to get in touch with workers on fishing boats because they are in deep sea waters far away from land, but my NGO keeps trying to find out more information from all the workers on fishing boats in Thailand,” said Srakaew.

Migrant workers on fishing boats still raise a concern for all stakeholders including the UN organisations, governments and NGOs with all of them trying to find ways to help.

## **EU and UNIDO to support fisheries sector in Cambodia**

<https://www.khmertimeskh.com/50908108/eu-and-unido-to-support-fisheries-sector/>

"With support of the European Union (EU), the United Nations Industrial Development Organization (UNIDO) in partnership with the Ministry of Agriculture Fisheries Administration (FiA) launched a Value Chain Investment Support (VCIS) programme yesterday aiming to support Cambodia's small, medium and large enterprises in post-harvest fisheries.

The VCIS is a co-investment scheme for the eligible fishery business operators to upgrade their productions and to add value to their products through food safety certifications to improve the competitiveness of their products in the national, regional and global marketplace.

VCIS provides both finance and non-financial support to Cambodian entrepreneurs, especially women and youth-owned businesses in post-harvest fisheries.

The programme offers support from \$25,000 to \$100,000 for eligible enterprises to upgrade their business operation to comply with food safety standards and market requirements. The VCIS opened the first round of applications last Sunday. VCIS is expected to co-invest over \$5 million with at least 100 enterprises along with their associated value chain actors in post-harvest fisheries. FiA director-general Poum Sotha said that the VCIS scheme will benefit enterprises and create sustainable impacts for the businesses.

Our aim is to improve the competitiveness of the Cambodia fishery businesses by establishing good practices, infrastructure, technology and food safety certification to achieve better markets not only within the country but also globally, Sotha said.

According to UNIDO, fisheries remain one of the Cambodia's key economic drivers and is a source of employment for vast percent of the population. The post-harvest fisheries sector has produced over 33,000 jobs especially for women.

The government recognised that fishery value chains are one of the pillars in the fisheries development having important roles in contributing to employment creation, food security and economic development as indicated in Strategic Planning for Fisheries (2016-25), Rectangular Strategy IV and the National Strategic Development Plan (NSDP) 2019-2023.



Bryan Fornari, head of cooperation of the EU, said that the EU-supported CAPFISH programme sets a long-term strategic plan to support the fishery sector and the private sector operators to strengthen and build a vibrant fisheries sector.

He said that VCIS leads to the realisation of valorising of fishery resources aiming at better markets globally including the EU. UNIDO country representative Narin Sok said that agriculture sector modernisation is important to guide the development of the sector until 2030. He said that the revitalisation of the sector is critical for economic development and for the livelihoods of a very large percentage of the population, as they continue to rely on agriculture, animal production, fisheries and forestry as main source of income.

He added that diversification of production, development of value chains and value-adding are all recognised as essential aspects for the modernisation of agriculture. €€~This will require an urgent transformation of the current agri-food system and a better awareness of the importance of nutrition and food safety, Narin said.

### **Climate change threatens food security of 65 nations: study**

<https://www.eco-business.com/news/climate-change-threatens-food-security-of-65-nations/>

"Scientists have projected that millions of people in 65 nations globally, particularly those in Africa and South-East Asia and the Pacific, could face increased malnutrition as climate change and overfishing take their toll on fisheries.

According to a study that analysed over 800 fish species from more than 157 countries, climate change and overfishing could lead to acute shortages of vital micronutrients from the oceans.

Countries whose fisheries are at increased risk include those in Sub-Saharan Africa such as Mozambique and Sierra Leone, and East Asian and Pacific countries including Cambodia, Indonesia, Malaysia and Timor-Leste, according to the study published this month (20 July) in Current Biology.

Countries with nutrient-dense catches are more vulnerable to climate change, mostly tropical nations from East Asia, Pacific, and Sub-Saharan Africa where micronutrient deficiencies are particularly prevalent, says Eva Maire, the studys lead author and a senior research associate at the Lancaster Environment Centre, Lancaster University, England. This suggests unmet potential for fisheries to help close nutrition gaps, especially amongst coastal communities.

Maire says that the study found a clear impact from climate change on the overall availability of micronutrients for 65 nations, and consequently threatening the food security of millions of people living in these countries could be threatened. She explains that fish is a good source of

protein and many vitamins, minerals, and fatty acids that are often missing in the diets of coastal populations throughout the world.

Making fish more accessible locally could have a huge impact on global food security and combat malnutrition-related diseases in millions of people globally, she adds.

Researchers analysed the combined influence of climate change and overfishing on micronutrient availability using fish catch data from 157 countries for the years 2010 to 2014. Our analysis highlights the need to consolidate fisheries, climate, and food policies to secure the sustainable contribution of fish-derived micronutrients to food and nutrition security, the study says.

Maire tells SciDev.Net that an earlier study found that climate change could lead to large-scale redistribution of global fish catches with a drop of up to 40 per cent. We need to find a way to put human nutrition at the core of fisheries policies. Food security policymakers should acknowledge that fish is nutrient-rich food and work on what can be done to increase access to fish by malnourished people.

Effective climate [change] mitigation is a high priority, she says. Edward Kimani, chief research scientist, fisheries and aquatic ecology at the Kenya Marine and Fisheries Research Institute, says that economic impacts of reduced fishery production include reduced employment and household incomes as well as other fisheries support activities, and reduced trade and exports. Fish production is dependent on the aquatic environment and climate change directly impairs productivity, he explains, adding that the study's findings could inform policymakers of the impacts of overfishing and climate change on one key source of food and nutrition in Africa.

It is an early warning towards preparing mitigation by reducing the impacts as well as developing alternative sources of food and economic activities to cover the loss due to overfishing and climate change, he says. Strategies for mitigating overfishing, according to Kimani, include the development of other economic activities such as coastal and marine tourism to reduce the number of people who directly depend on fishing, and the development of fish farming to reduce dependence on harvesting of fish in their natural habitat.

### **Storms on the way for Cambodia this week courtesy of Typhoon In-Fa**

<https://www.khmertimeskh.com/50902185/storms-on-the-way-for-cambodia-this-week-courtesy-of-typhoon-in-fa/>

"Cambodia's Ministry of Water Resources and Meteorology (MOWRAM) has appealed to people to be vigilant of possible phenomena such as thunder, lightning, gusts, strong wind and high waves this week, particularly at coastal areas.

In its new weather forecast issued this morning, MOWRAM explained the phenomena by the influence of ITCZ low pressure, southwest monsoon and Typhoon In-Fa. Between July 28 and Aug. 3, the same source pointed out, the temperature would vary from 24 to 32 degrees Celsius for the provinces in the central lowland areas, from 23 to 31 degrees Celsius for the provinces next to the Dangrek mountain range and highland areas in the northeast, and between 23 and 30 degrees Celsius in the coastal areas, accompanied by light to heavy rain across the country.

According to the ministry's announcement released yesterday, the Mekong water will keep rising in the next three to four days, which would inundate riparian areas in the provinces of Stung Treng, Kratie, Kampong Cham and Thbong Khmum.

Anyway, the surge will not reach the alert level yet, MOWRAM underlined, calling on farmers in the affected areas to hurry in collecting their agricultural produce and to increase their vigilance to avoid any possible accidents.

### **Chinese hackers stole Mekong data from Cambodian foreign ministry: Sources**

<https://www.channelnewsasia.com/news/asia/chinese-hackers-stole-mekong-data-from-cambodian-foreign-15268318>

"Buried in a long US indictment accusing China of a global cyberespionage campaign was a curious detail: Among the governments targeted by Chinese hackers was Cambodia, one of Beijing's most loyal Asian allies. The target of the hack, which two sources with knowledge of the indictment said was Cambodia's foreign ministry, was also revealing: discussions between China and Cambodia over the use of the Mekong River, a new battleground for US and Chinese influence in Southeast Asia. Four Chinese nationals - three security officials and a contract hacker - have been charged with attacks aimed at dozens of companies, universities and government agencies in the United States and abroad, the US Justice Department said on Monday.

Reaction from the defendants named in the indictment was not immediately available. The accusations, which China has said were fabricated and politically motivated, were outlined in a 30-page US court indictment detailing the activities of what it said was a front company run by Chinese state security in Hainan, a Chinese island province near Southeast Asia. Among the hackers' targets was ""Cambodian Government Ministry A"", according to the indictment, from which they ""stole data pertaining to discussions between the Governments of China and Cambodia over the use of the Mekong River"" in January 2018.

That ministry was Cambodia's Ministry of Foreign Affairs, two sources with direct knowledge of the indictment told Reuters. China's embassy in Cambodia did not respond to a request from Reuters for comment. In a response to questions from Reuters, China's foreign ministry said the

accusations were groundless and that the United States was the world's largest source of cyber attacks. A Cambodian foreign ministry spokesperson referred questions to the telecommunications ministry, which declined to comment. Cambodian government spokesperson Phay Siphon declined to comment.

The 4,350km-long Mekong, known as the Lancang in its upper reaches, flows from China along the borders of Myanmar, Laos and Thailand through Cambodia and Vietnam, where it has supported farming and fishing communities for millennia. Like the South China Sea, the Mekong River has become a front in US-China rivalry, with Beijing overtaking Washington in both spending and influence over downstream countries at the mercy of its control of the river's waters. According to the indictment, Chinese hackers obtained data from the Cambodian ministry on the same day Cambodia hosted the China-backed Lancang-Mekong Cooperation (LMC) leaders summit with China, Laos, Myanmar, Thailand, and Vietnam in Phnom Penh on Jan 10, 2018.

The data obtained by the hackers pertained to those discussions, the indictment said, without elaborating. On the same day, the hackers hid and transmitted ""trade secrets and proprietary hydroacoustic data"" within digital images of a koala bear and former US President Donald Trump, according to the indictment. It said the material was sent to an online account controlled by the hackers. It was not clear if the hydroacoustic data - data collected by sonar and used to monitor underwater features - was of the Mekong River area. Last week, US Secretary of State Antony Blinken told Southeast Asian foreign ministers the United States supported a ""free and open Mekong region"" under the Washington-backed Mekong-US Partnership.

### **Thailand migrant workers sign contracts they dont understand, undercutting efforts to stop abuses**

<https://www.voanews.com/east-asia-pacific/thailand-migrant-workers-sign-contracts-they-dont-understand-undercutting-efforts>

"Migrant workers from Cambodia and Myanmar are being asked to sign contracts they cannot read in order to work in Thailand's fishing fleet, a new study has found, undercutting efforts to expunge abuses from a sector worth billions of dollars to the Southeast Asian country. Thailand is one of the world's largest fish and seafood producers, boasting global brands that include John West and Chicken of the Sea.

Authorities have been scrambling for several years to clean up an industry riddled with abuses, though, after grim revelations of human trafficking of Thais and migrant workers, forced work, defaults on payments, beatings and even murders on fishing boats. All of this contributed to the U.S State Department dropping Thailand onto the worst possible ranking Tier 3 of its annual

Trafficking in Persons (TIP) report in 2015, as well as threats by the European Union to suspend seafood imports for alleged illegal and overfishing. However, Thai government efforts to register all workers with contracts, identity cards and e-payments to ensure salaries are paid rather than deferred alongside wider prosecution of human traffickers have helped the kingdom move into Tier 2.

Prime Minister Prayuth Chan-O-Cha has said he hopes his country will be elevated to the top tier -- compliant with U.S. standards -- after an extensive campaign to monitor the fishing sector, including spot inspections and electronic tags to track unscrupulous boat owners. The latest TIP report is expected to be published in the coming weeks; but a survey by the ITF-Fishers Rights Network, shows that basic legal protections for workers are still not being met.

Of 520 fishers surveyed at Thai ports between March-June 2021, the FRN said just a tiny fraction had even had their contracts translated into their native languages. A shocking 89 percent of fishers had not had their contract translated or explained to them in a language they could understand, said Jon Hartough, ITF-FRN Thailand Project Lead. Quite often fishers are recruited in rural areas of Myanmar and Cambodia ... its a verbal contract when they are told what the terms and conditions will be. But when they sign the document, its unclear what the conditions are, they are signing, he added.

This is important ... because of how this manifests in working conditions. Vulnerable fishers are often low-skilled and desperate for income a condition worsened by the coronavirus pandemic, as well as Myanmar's economic collapse following a February 1 coup. Burmese and Khmer fishers still face serious issues such as wage theft, lack of adequate food or clean drinking water on board, debt bondage, document retention and other labor abuses, according to Ye Thwe, FRN president and former fisherman. The Thai government commitments are as thin as the paper they're written on. Labor violations are still rampant, and contracts are not being properly followed, he said, adding fishers often report late or incomplete payments, dangerous conditions at sea and deliberately misleading contracts - where they exist at all.

The Department of Fisheries says it has translated government guidelines into fishers languages, so they know their rights under tightened Thai laws. The DOF has prepared a manual for commercial fishermen ... in an easy-to-understand language and distributed it to fishermen, to build knowledge and understanding of legal guidelines, Mesak Pakdeekong, director general of the Department of Fisheries, told reporters in early June. Meanwhile, authorities have released a €PROTECT-U multilingual app to help victims of trafficking seek urgent help safely.

While not named in the FRN study, big seafood companies including Thai Union, which owns Chicken of the Sea, say they have made major strides to clean up their supply chains and adhere strictly to government rules. But labor rights groups say the recruitment system is prone to abuses. Brokers travel across poor rural areas of Southeast Asia persuading desperate workers

to go to sea for long periods of time, often far from contact with authorities or their families. As profit margins are squeezed in overfished seas, experts say boat owners or unscrupulous captains who marshal the workers hold out on agreed salaries or instead promise a percentage of the catch as payment that never materializes.

Yet the supply of labor has increased since the pandemic with whole communities left out of work for months on end. One Thai fisherman from the landlocked northeastern farming region of Isaan, who has been cheated of his wages before but is preparing to go back out to sea, said the poorest have few options as the pandemic crushes their incomes. The guys from my village still go out to sea, the fisher told VOA news, requesting anonymity. We know the risks, but were willing to gamble our lives. Staying home can be as bad; we can go hungry.

### **Cambodia Minister: Protect fish habitat**

<https://www.phnompenhpost.com/national/minister-protect-fish-habitat>

"Cambodia's Minister of Agriculture, Forestry and Fisheries Veng Sakhon urged an end to the destruction of flooded forests that serve as fish habitat and the use of creeks to plant lotus trees. Sakhon made the call as the Kingdom observed National Fish Day on July 1. Since 2003, National Fish Day is celebrated every year with the release of breeder fish and fish spawn and other aquatic animals of local varieties totalling five million fish per year into our natural waters. The release is to increase the national fish stock production to help sustain the livelihoods of local people, he said.

The minister added that due to Covid-19, large-scale celebrations were missed in 2020-21 but the release of fish eggs into natural waters continued in local communities. He mentioned the seven recommendations by Prime Minister Hun Sen including a total ban on illegal fishing equipment use during the spawning season, flooded forest logging in spawning habitats and taking over creeks for non-fishing purposes. He encouraged the people, especially fishermen and relevant authorities at all levels, to follow the recommendations to ensure the sustainability of national fish resources in Cambodia for all generations of mankind.

The fisheries sector is considered the primary source of nutrition and income while also exhibiting a strong influence on Cambodian culture, according to a study released on June 30 by the Wonders of the Mekong. It said fisheries created jobs for over six million people living along rivers, around the Tonle Sap Lake and in coastal areas, accounting for 45.5 per cent of the total Cambodian population.

Among those six million people, 10.5 per cent consider fishing as their primary occupation while the other 35 per cent consider it a secondary occupation. Fish are truly essential to the Cambodian people and their welfare, said the report. It noted that since the year 2000, the inland

fishery production in Cambodia has ranked fourth in the world after China, India and Bangladesh. However, if just the average catch of freshwater fish per capita was considered, Cambodia would rank first in the world.

On average, Cambodian people consume up to 37.5kg of fish per year meaning Cambodia has among the highest rates of fish consumption in the world. Cambodians living along the lowland areas near the Tonle Sap Lake and Mekong River consume up to 67kg of fish per year. The Kingdom far surpasses most other countries in the world, which eat an average of 15kg of fish per person, according to the report.

### **Root and branch reform: Protecting and restoring the worlds mangrove forests**

<https://phys.org/news/2021-06-root-reform-world-mangrove-forests.html>

"With the International Day of Forests 2021 already a fading memory, perhaps it's time to forget them for another year and shift our attention to the next worthy cause. Well, no. If anything, we need to be redoubling our efforts to ensure that they remain permanently in the spotlight, not least the most neglected, threatened and undervalued forest type of all. Mangroves have never really had their day in the sun, despite their crucial importance as coastguards, climate allies and wildlife havens. Fauna & Flora International (FFI) views mangrove protection and restoration as an integral part of our global efforts to reverse biodiversity loss and combat climate change, twin challenges that are inextricably linked. Across our project portfolio, we are striving to redress the balance, working with in-country partners to ensure that mangroves receive the attention they deserve.

FFI works across an 800,000-hectare seascape in Honduras, the vast majority of which comprises three important marine protected areas (MPAs), namely Cuero y Salado Wildlife Refuge, the Cayos Cochinos Marine National Monument and the island of Utila in the Bay Islands National Marine Park. This seascape contains interconnected estuary, lagoon, mangrove, seagrass and coral reef habitat and is part of the globally important Mesoamerican Barrier Reef. The area harbors a rich diversity of species including the critically endangered hawksbill turtle, the Antillean manatee and the little-known and intriguingly named wishiwilly del suampo, a critically endangered spiny-tailed iguana confined to the island of Util”and one of only two lizard species found exclusively in mangrove swamps.

The degradation of mangrove habitat, which provides sanctuary for numerous coastal and marine species, particularly juvenile fish, has contributed to the decline in fisheries that is threatening the livelihoods of coastal communities in Honduras. FFI and our in-country partners have established a mangrove monitoring program and, with community support, we are aiming to reforest an area of mangrove estimated to sequester an additional 3,000 tons of carbon. There are ongoing efforts to remove an invasive oil palm that poses an additional threat to the native trees.

We are currently exploring opportunities related to blue carbon across the seascape, which has potential to expand mangrove cover by approximately 800 hectares, and seeking support for further coastal restoration to reduce land-based impacts on the nearshore environment and build resilience to hurricanes, as well as conducting a blue carbon feasibility study.

Cambodia's extensive coastline is fringed by almost 80,000 hectares of mangrove forest, which provide natural nurseries for the reef fish and other marine life on which numerous coastal communities rely for their livelihoods. FFI's work is focusing on the establishment of a national network of MPAs, building on our critical support for the designation of Cambodia's first large-scale MPA in the Koh Rong Archipelago in 2016.

As part of our wider marine conservation and fisheries management efforts, FFI is working to maintain the intact mangroves lying within the MPA boundary. This is combined with locally led initiatives to restore previously deforested mangrove areas, and four community mangrove nurseries have been established so far within Koh Rong, paving the way for future scaling up of restoration efforts.

In support of community-based approaches to the protection and restoration of marine resources, we are also investigating the use of sustainable financing mechanisms including opportunities to secure payment for blue carbon storage and sequestration by mangroves and other coastal forest, thereby increasing resilience to climate change impacts.

FFI is forging new partnerships for mangrove protection and marine conservation in the far north of Koh Kong province, on Cambodia's northern coast. This work focuses on approximately 16,000 hectares of mangrove forest in Peam Krasop Wildlife Sanctuary and Koh Kapik Ramsar Site, a wetland recognized for its international importance in helping to build climate resilience.

As the world's largest archipelago comprising an astounding 17,500 islands, Indonesia is on the front line of climate change and heavily dependent on the health of its coastal and marine ecosystems. FFI works across a number of project sites in Aceh, West Papua and West Kalimantan to support and enhance coastal resilience. In order to ensure community buy-in, much of our work in these locations revolves around the establishment of locally managed marine areas in which resource use is governed by customary laws and practice. These multiple-use zones also encompass mangrove habitat, and are largely patrolled by communities, with ad hoc support from government officials. In future, we are aiming to help strengthen management of mangrove resources, promote development of more sustainable harvesting methods and support community engagement in local decision-making to enhance coastal resilience. Protecting mangroves from clearance for charcoal production has been a focus in southern Myanmar, where, in collaboration with local fishing communities and the government, FFI is in the process of establishing locally managed marine areas that include mangrove habitat.



In northern Kenya, FFI has partnered with the Northern Rangelands Trust and the Nature Conservancy to support Kiunga and Pate Island Conservancy in addressing the significant threat posed by the unsustainable extraction of mangroves for firewood and poles used in construction. Efforts to reduce illegal exploitation have so far focused on increasing the number of patrols carried out by local rangers. Meanwhile, restoration measures have included the planting of more than 35,000 mangrove seedlings since 2015.

Following initial success on the island of Pemba, FFI is scaling up its engagement to take an ecosystem-based approach to coastal resource management in northern Tanzania, incorporating 300,000 hectares of coastal forest across Zanzibar and the mainland. The coral reefs of Pemba, among the most diverse in East Africa, are extremely vulnerable to climate change. FFI is working to promote ecological resilience by reducing direct pressures on the marine environment through the introduction of community fisheries management measures and work to reduce the harvesting of mangrove wood.

### **Cambodia's Min. of Agriculture responds to allegations of loss of fisheries**

<https://www.khmertimeskh.com/50878069/min-of-agriculture-responds-to-allegations-of-loss-of-fisheries/>

"Cambodia's Ministry of Agriculture yesterday responded to criticism and accusations by opposition groups and the media that the decline and loss of fish production is due to the incompetence of the Ministry, the Fisheries Administration and local officials. The criticism also raised concerns over illegal deforestation, flooding, illegal occupation and no measures to release fish species.

Minister of Agriculture Veng Sakhon said critics have the right to express their views, as well as finding corrupt officials for legal action, adding that these individuals should recognise the political turning point in the governments reform of this sub-sector since the implementation of decentralisation after 2016.

The government decided to decentralise by giving authority to the governors to lead the crackdown on fisheries and forestry crimes. Now in these cases, the ministry can only intervene if necessary. Sakhon said: The loss of natural resources in the past has many reasons. As I have already stated in the press release, because it is a matter of approval, not the ministry, because it started from the process of national economic growth, urban growth, urban congestion and sedimentation of waterways and canals along rivers.

Apart from our current aquaculture, there is a lack of capital, a lack of water resources, a lack of integrated farming and difficult harvests that take a long time from one province to another to collect, supply, market and transport as well, he said. There are still many challenges that we are

looking at and addressing interdepartmentally with the Ministries of Agriculture, Economy, Commerce, Water Resources, the Rural Development Bank and local authorities, said Sakhon.

Although Cambodia faces a number of remaining challenges related to aquaculture and market issues, aquaculture in Cambodia over the last five years (2015-2020), has achieved progress with remarkable acceleration. The annual harvested aquaculture yields were as follows: 2015 had 143,141 tonnes, 2016 had 172,500 tonnes, 2017 had 207,443 tonnes, 2018 had 254,048 tonnes and 2019 had 307,408 tonnes.

The average annual aquaculture output increased by 20.6 percent from 2015-2019 and in 2020 increased to 400,400 tonnes, an increase of 30 percent compared to 2019, he said. Sakhon said: The steady increase in aquaculture output is due to the interest and active participation of our Cambodian aquatic farmers, combined with the support from the government, both technical and capital including loans from partners for international development of aquaculture activities in Cambodia.

According to a press release issued by the Ministry of Agriculture on June 15, the main reason for the supply and demand of fish is that Cambodia continues to face unresolved challenges. Other factors include decreased natural fish production due to population growth, over-fishing techniques and offenders, over-fishing tricks, environmental degradation and loss of spawning habitat, climate change, Mekong River usage and cooperation with authorities responsible for cracking down on fisheries crimes are still limited after the government has introduced a policy of reforming the transfer of power to the sub-national level.

Fisheries administration have stated that private investment in aquaculture still lacks capital and knowledge to study the needs of domestic and foreign markets, combined with the cost of domestic transportation and high costs. The Ministry of Agriculture has been actively pursuing a public-private development partner and community approach to address the above-mentioned challenges, he said.

### **Cambodia's fish consumption up despite supply, market challenges**

<https://www.phnompenhpost.com/national/cambodias-fish-consumption-despite-supply-market-challenges>

"The Ministry of Agriculture, Forestry and Fisheries announced that fish consumption in Cambodia has increased, with one person consuming on average 52.4kg of fish per year. Fish consumption by people in low-lying areas has also increased, with the population there consuming 75.6kg of fish on average per person each year. The increase came despite challenges related to fish supply shortages and market demands in the country. In a press release on June 15, the ministry said that based on preliminary figures from the general census completed on

March 3, 2019, the Cambodian population was 15,288,489 an increase of 14.1 per cent over 11 years since the last census in 2008.

The larger population has increased demand for fish even further, and during the Covid-19 pandemic the government encouraged people to implement aquaculture projects in 11 target provinces, including four provinces hit by flooding. The government encouraged the raising of catfish and frogs in plastic bags because the method is cost-effective.

The ministry has also cooperated with the Cambodian Aquaculturist Association to implement the National Strategic Plan for Aquaculture Development 2016-2030. As a result, aquaculture production in 2020 increased more than 30 per cent compared to 2019. Human resources related to aquaculture work are sufficient for the aquaculture sector in Cambodia currently. Aquaculture specialists have received training at home and abroad and in turn have trained farmers in these skills so that they can raise fish in almost every province, it said.

The ministry acknowledged that fish supply in Cambodia had not proven sufficient to meet market demands without the use of imports. The challenges with supply could not yet be addressed because of a few factors including a decline in natural fish populations, differences in managing fish markets in Cambodia and competition in domestic markets. The other challenges included complicated inspection mechanisms for fish imports and the rules related to quantity, quality and other obligations for importers. Also, the private aquaculture investment sector in Cambodia still had a lack of capital and knowledge regarding market demand research at home and abroad. Domestic transport prices for imports, service prices in production, expensive processing and stocks were also ongoing challenges, the ministry said.

Aquaculturist Song Dina, who raises fish and frogs in five ponds on 3ha in Dauntei commune of Tbong Khmum provinces Ponhea Kraek district, acknowledged that fish consumption had increased year after year. But he said the fish being supplied to the market by Cambodian producers was not in demand because of the fish imported from Vietnam. He said fish imported from Vietnam cost only 4,000 riel (\$1) per kilogramme, while Cambodian fish farmers had to price their fish higher and that if fish imports from Vietnam were banned, then fish raised in Cambodia would sell for higher prices.

Dina noted that it took only two months to raise fish in Vietnam, but Cambodian fish farmers spent up to five to seven months to grow the same fish which required a lot more feed for them. Agriculture minister Veng Sakhon told The Post on June 16 that relevant institutions must join the ministry in addressing the issue. There are many intricacies involved in solving these problems. How can the agriculture ministry be expected to fix this alone? It is not possible. Several ministries [and stakeholders] must work on this together, he said.

Sakhon said his ministry had the role of teaching farmers the techniques for raising fish, while other ministries had the role of developing a market for the farmers to sell their produce. He

noted that the agriculture ministry had often been expected to step into this role and provide assistance as well.

### **Hopes dashed for Kampong Cham fishermen in Cambodia as conservation lake dries**

<https://www.khmertimeskh.com/50873708/hopes-dashed-for-kampong-cham-fishermen-as-conservation-lake-dries/>

"For many years, illegal and over-fishing have depleted the population of fish in the lakes and rivers across Cambodia, particularly during the dry season. For fishermen in Kampong Cham provinces Kang Meas district, they have pinned their hopes on a conservation lake on the border with Kandal province which has bred all kinds of fish to be released into six other lakes when the Mekong River flows into them during the rainy season. However, the hopes of fishermen living around the six lakes in the district have been dashed as the conservation lake has dried up this year before the Mekong River fills it with water.

Yet, the conservation lake in Kang Meas district, known as Boeng Bak Rotes, has dried up due to human causes and not climate change like other lakes. According to Eang Nam, head of Kang Meas District Fishing Community, Beong Bak Rotes covers an area of around 50 hectares with the centre of 30 hectares as being reserved for conservation. Fishermen can catch fish in the surrounding area but not in the centre, he says. During the rainy season, he says the lake is between 5 metres and 6 metres deep but it shrinks to 1.5 metres and 1 metre deep during the dry season. This lake has never dried up no matter how low the water is, he says.

This year, however, Nam says rice farmers have looked at the conservation lake as the last source of water for their farming after they had claimed more forest and lake land and turned it into rice fields. When there was no water anywhere near, they started pumping water from the conservation lake, he says. Before long, Beoung Bak Rotes has dried up and the fish have been caught or killed. The loss of the main breeding fish from Beoung Bak Rotes has turned the fish population from bad to worse and will have a domino effect on fishermen, fish vendors and consumers as a whole in Kang Meas district and other people near and far.

May Kien, a 46-year-old father of two who has been a fisherman for 15 years, says it has become harder and harder for him and other fellow fishermen to catch fish in the lakes in Kang Meas district. I used to catch between 10 and 15 kilogrammes of fish but now I can catch only about 2 to 4 kilogrammes per day, he says. Our life will become even more difficult after the conservation lake has dried up. However, Kien says he still hopes that there will be some fish left if there is no illegal fishing in the lakes in his district when the lakes are filled with water from the Mekong River. Kien says he is now making a living by fishing in the Mekong River instead using a casting net when he cannot fish in the lakes.

But, illegal fishing is even more serious in the Mekong River, he laments. Some fishermen have used illegal pulling fishing nets that can catch even the smallest fish. Because of the sharp decline of fish, Kien says he tries to find whatever daily work he can as a manual laborer to supplement his fishing career. When people die, their families hire me to dig and build graves for them, he says, looking at a new grave behind his house.

Likewise, Ry Kim Sreang, a 43-year-old villager who has been a fisherwoman for more than 20 years in Kampong Cham province, says she and husband also face difficulties in catching fish by using seine fishing nets. In the past, we could just deploy a 200-metre seine net and we could catch enough fish to sell and feed our children, she recalls. Now, we use a 500-metre seine net and can catch only a few kilogrammes of fish.

Kim Sreang says her family has now focused more on rice farming and raising cows to make a living. How can we rely on fishing if there are no fish in the lakes and rivers? she asks. We would rather work on the land doing whatever jobs we can find. On the banks of the Mekong River, fish vendors also resort to whatever source of fish they can buy to sell at a small market which sits on the boundary between Kampong Cham and Kandal provinces.

I think there may be no more natural fish from the lakes and rivers in the future, says 28-year-old Chim Samban, adding that virtually all fish he sells are from aquaculture fish farms. Samban says he used to earn around \$20 per day when there were a lot of natural fish. But, he says he can earn only about \$5 now and that he has to work as a vegetable farmer in between his fish selling career. You cannot rely on selling fish alone, he says.

Sin Srey Touch, a 38-year-old fish vendor who works next to Samban in the same market, says life is not better for her either. People don't like to eat fish from aquaculture farms that use chemical feed, she says. Srey Touch says most fishermen sell the fish they catch in the lakes and rivers for \$5 per kilogramme to middlemen who then sell them in Phnom Penh for a higher price.

We sell fish from aquaculture farms for only \$2.50 per kilogramme, she says. But, they do not taste as good as the natural fish from the lakes and rivers. Meanwhile, Kith Sareth, a 55-year-old fish vendor from Kang Meas district, says she also sells chicken and duck meat as well as bananas and other fruits to make a living. When I go home after working at the market, I also collect and buy recyclable materials to sell, she says. You have to work much harder to feed the family.

Nevertheless, Eang Nam from Kampong Cham fishing community says the future is not too bleak for fishermen in his district. If the government can find an alternative source of water for rice farmers, we can preserve the water and fish in the conservation lake, he says. They may help dig a water reservoir for rice farmers to use during the dry season.

But, fishermen like Kien and Kim Sreang in Kang Meas district will continue to make their living from fishing in the Mekong River before they can find more fish in the lakes again in the future.

### **On World Ocean Day, fishermen and their supporters oppose MPAs favoured by environmental NGOs**

[www.icsf.net](http://www.icsf.net)

"On 8 June 2021 -- World Ocean Day -- organizations of fishermen and their supporters, including the collectif pêche et développement in Lorient, France, rallied to declare their opposition to the unilateral and exclusionary policies that favour the establishment of marine protected areas (MPAs) designed to declare 30 per cent of the world's oceans as complete reserves closed to so-called ""industrial"" fishing. Industrial fishing is defined as fishing involving motorised vessels that are over 12 m long and 6 m wide, with a capacity of over 50 kg catch/voyage, and that require substantial sums for their construction, maintenance and operation, and are mostly sold commercially, including all fishing using trawling gears that are dragged or towed across the seafloor or through the water column, and fishing using purse seines and large longlines.

Pointing to the disregard for fishermen's experiences, knowledge and commitments, the collectif pêche et développement asserts that to embark on a path of authoritarian and technocratic ocean management is to call into question the culture, knowledge and life of fishermen without taking into account the reality of their practices and commitments. If we look at the recent history of the fight for the environment not only in Brittany, but also in other countries from the North to the South, we find fishermen fighting against, for instance, the Plogoff nuclear power plant, and the development of marinas, sand and oil spills, notes the collectif pêche et développement.

They are involved in MPAs such as the Iroise Marine Park, the Natura 2000 area of the Roches de Penmarc'h, the SMVM of the Golfe du Morbihan, the Sein Island reserve, etc. They have set up programmes for the restoration of crayfish, the protection of maerl beds, the RESPECT project, etc.

They debate within the MPA management and programme steering bodies, with scientists and local environmental associations. This takes time and energy, and the debates are sometimes difficult, but there is respect on both sides. This is how things can move forward on a democratic basis, whereas authoritarian decisions taken by political or scientific bodies that are totally removed from the realities and complexity of the marine environment can only lead to sterile opposition. Unfortunately, it is feared that the machines for excluding the voiceless will inexorably continue its steamroller course -- unless our warnings provoke strong and salutary reactions. According to the indigenous peoples' organization, Survival International: ""Major

conservation NGOs claim that (MPAs) will mitigate climate change, reduce wildlife loss, enhance biodiversity and so save our environment. They are wrong. Protected areas will not save our planet.

On the contrary, they will increase human suffering and so accelerate the destruction of the spaces they claim to protect, because local opposition to them will grow. They have no effect on climate change and have been shown to be generally poor to prevent wildlife loss. The idea of 'conservation-fortress' -- that local people should be removed from their land in order to protect nature -- is colonial. "" In a paper published in World Development (Volume 146, October 2021), Marco J. Haenssger et al analyzed the socioeconomic development impact of marine resource management and conservation in Southeast Asia

They concluded: Qualitative research based on 22 interviews in Koh Sdach Archipelago, Cambodia demonstrates how the local community experienced improving relationships with the state and a slowing deterioration of marine resources, but also social division, heightened livelihood anxiety, and potentially a false sense of economic security.

We hypothesise on this basis that marine conservation could impede socio-economic development, for which we find support in our quantitative analysis across Cambodia, the Philippines, and Timor-Leste: MPAs materialised in better-off communities but were associated with slower and partly regressive socio-economic development, in particular decreasing wealth and increasing child mortality.

They added: These findings suggest that the rapid global expansion of MPA coverage in its current, environmental-conservation-focused form is problematic as it disregards local social realities. Livelihood adaptation support should complement the implementation of marine resource governance mechanisms to mitigate unintended negative consequences.

### **On World Oceans Day, threats to West Philippine Sea gain relevance**

<https://globalnation.inquirer.net/196833/on-world-oceans-day-threats-to-west-philippine-sea-gain-relevance>

"World Oceans Day is celebrated each year across the globe every June 8. The United Nations said the yearly event seeks to generate awareness on the impact of human activities on oceans, which is gaining relevance especially in the West Philippine Sea. World Oceans Day reminds everyone of the major role the oceans have in everyday life, the UN said. They are the lungs of our planet and a major source of food and medicine and a critical part of the biosphere, it added. As part of this year's celebration of World Oceans Day, the global impact of illegal fishing, especially by China in the West Philippine Sea, is recalled. A study published in 2020 in the scientific journal Science Advances revealed that between 2005 to 2014, at least 7.7 to 14

million metric tons of illegal fish catches were traded illicitly each year. As a result, between \$8.9 and \$17.2 billion in gross revenues were lost to illicit trading.

The study also found that Asia, Africa, and South America were dealt a huge blow in illegal catch and gross revenue losses during the same period. Analysis by data consumer company Statista on Tuesday (June 8) noted that the Asian continent loses at least \$6.7 billion in annual gross revenue from illegal fishing and trading.

Assuming that 50 to 80 percent of illicit commercial catch and 10 to 30 percent of the illicit artisanal catch is traded, up to \$3.4 billion is lost every year in the Western Central Pacific (incl. the South China Sea), while up to \$2.0 billion vanishes annually in Northeast Asia and up to \$1.5 billion of revenue goes missing in the Eastern Indian Ocean every year, said Statista's Katharina Buccholz, citing the 2020 study.

The Central Eastern Atlantic lost around \$4.3 billion each year. Among the countries that suffered the most revenue loss due to illicit fishing were China, the Philippines, the US Pacific territories, Cambodia, Indonesia, Malaysia, Morocco, Mauritania, Russia, and Guinea. The harmful economic impact of the illicit trade of illegally caught fish does not only harm annual revenues of regions or countries worldwide. According to the study, illegal fishing has also brought to Asia food insecurity, job loss, and income loss for local fishers.

In 2019, out of a total of 152 coastal states assessed worldwide, China gained the worst scores for their degree of exposure to and quality of response toward illegal, unreported, and unregulated (IUU) fishing. <https://www.iuufishingindex.net/> China, which operates the world's largest overseas fishing fleet with 200,000 to 800,000 fishing boats, accounts for nearly half of the world's fishing activity according to an article published in 2020 at the Yale School of the Environment.

Aside from being the world's biggest seafood exporter, China's population also accounts for over a third of the total fish consumption worldwide. Having depleted the seas close to home, the Chinese fishing fleet has been sailing farther afield in recent years to exploit the waters of other countries, including those in West Africa and Latin America, where enforcement tends to be weaker as local governments lack the resources or inclination to police their waters, said investigative reporter Ian Urbina in his article.

Most Chinese distant-water ships are so large that they scoop up as many fish in one week as local boats from Senegal or Mexico might catch in a year he added. China has also expanded its maritime presence in Northeast Asia and most notably in the West Philippine Sea, causing the still unresolved territorial dispute and tension between the Philippines and China.

This was despite the international arbitral ruling in The Hague in 2016 which declared China's mythical nine-dash claim to most of the South China Sea, including the West Philippine Sea, as



invalid and baseless. China, according to the ruling, violated Philippine sovereignty and Filipinos right to fish and explore resources in the West Philippine Sea. Beijing considered the ruling as trash and does not recognize it.

The Philippines, along with fellow Southeast Asian neighbors Brunei, Malaysia and Vietnam, have overlapping claims to the sea along with China. Despite an agreement to refrain from provocative actions, China has continued to expand and militarize territories that it claims in the maritime region.

### **Fishery officials in Siem Reap, Cambodia, pumping water to save protected fish species**

<https://www.phnompenhpost.com/national/siem-reap-fishery-officials-pumping-water-save-protected-fish-species>

"Siem Reap provincial Fisheries Administration officials are rehabilitating and pumping water into streams, canals and reservoirs in the Boeung Pearaing breeder conservation area to save fish species. Chan Tong, deputy head of the provincial Fisheries Administration, told The Post on June 6 that hot weather and low levels of water in the conservation area have caused the death of hundreds of breeder species, which has alarmed people.

After seeing the dead fish, our team inspected the area and found that in some places the water is only 0.3m to 0.4m deep and only 0.7m to 0.8m at other places. The climate in the area is also very hot which reduces the amount of oxygen in the air and water, he said. According to Tong, his team has used a pump to transfer water from two reservoirs at the top of the lake into canals and breeding wells in the conservation area in an attempt to save the animals.

For two days, we dug a canal below the lake, which is 5m wide and 1.5m deep, 100m long and pumped in water to improve the movement of fish. The number of dead fish has decreased as well, he said. Residents living near the conservation area have asked authorities to dig more water storage areas at the top of the lake to supply water during the dry season.

Soeun Sambo, head of the conservation department of the Tourism Association of Pea Reaing Community, told The Post on June 6 that while officials are pumping water from the reservoirs into the canal system and breeding areas of the lake, it is only a short-term solution.

The water is now about 1.5m deep, but it could dry up again if we do not dig more ponds or wells to store more water in the upper and middle parts of the lake, Sambo said. Sambo added that since wildfires in May, the weather in the area has been very hot with no rain. The lakes water has evaporated and it is shallow. In the space of just three days from June 2-4, nearly a tonne of breeder fish died.

Some birds became ill and died as well. Our community is currently raising money to dig pumping wells and a large deep pond. We will pump water to the wells then transfer it to the lake and save those breeder fish, he added. He said that in the past, the provincial Department of Agriculture, Forestry and Fisheries had dug canals and small ponds, but they were too small to store enough water for fish in the dry season.

### **Downstream Mekong project success proves China's commitment to improving livelihoods, boosting hydropower capacity in Mekong region**

<https://www.globaltimes.cn/page/202105/1224064.shtml>

"After an in-person visit to China's reservoir and learning dam-building skills, the Mekong River envoys relay how infrastructure projects undertaken by China in their countries, especially hydropower projects, have served local people, boosting their wellbeing and socio-economic development along with other concrete benefits. The Mekong River has a huge elevation difference which contains huge water energy resources.

According to the relevant data, the water energy reserve of the Mekong River is 58,000 MW, with huge developmental potential. China, as a main riparian country with mature technology in water conservancy construction, actively shares its experience in water conservancy construction with other Mekong countries and assists in their domestic dam building, under Lancang-Mekong Cooperation (LMC) mechanism initiated in 2016.

However, China's participation in the Mekong River water conservancy project through normal bidding has incurred long-term slander by some Western media and non-governmental organizations outside the region. Lower Sesan II hydroelectric power station in Stung Treng province, Cambodia, is a hydropower plant inaugurated in 2018 that was invested in, built and run by a Chinese company.

The 400 MW dam is the largest in Cambodia and the seventh built by China in the Southeast Asian country. Cambodian Prime Minister Samdech Techo Hun Sen said the project can contribute to ensuring energy security, lowering the price of electricity, and reducing poverty in Cambodia, which is a fine example of cooperation in the energy sector between Cambodia and China. However, a report by US-based non-profit International Rivers accused the project of failing to meet basic environmental and social standards similar to other dam projects developed by Chinese state-owned contractors.

Media such as Voice of America [VOA] cited Brian Eyler, a Senior Fellow and Director of a Washington-based think tank Stimson Center, to claim that the risks of dam building along the Mekong River outweigh the benefit, and one of the key risks brought by dams - especially mainstream dams at Stung Treng and Sambor - is to fish stocks.

However, the foreign media hype was refuted by Cambodian diplomats and project contractors in China. According to the environmental impact assessment of the project, there are 34 kinds of long-distance migratory fish in the project. In order to meet the needs of these migratory fish and maintain the diversity of fish in the area, the contractor, Huaneng Lancang River Hydropower Inc, creatively proposed to build a fishway, to the Cambodian government, Zhou Jian, a vice president of the Huaneng Lancang River Hydropower Inc., told the Global Times.

For the 2,900 meter-long fishway, the maximum water level difference between upstream and downstream is 26.5 meters. While the bottom width of the fishway is 4-5 meters, rest pools are set every 800 meters to better facilitate the migrating fish, according to Zhou. Zhou told the Global Times that environmental protection work has always been their top priority in setting up the project, as they have closely followed strict standards and supervision on atmospheric protection, production, and domestic sewage treatment, soil and water conservation, and community impact assessment."

"The appeals of local people are always collected and addressed as much as possible. But many things need the support of the local government such as being responsible for the resettlement of migrants. China has a lot of good experience in the resettlement of migrants in dam construction areas. We can invite people from Mekong countries to see how resettlement villages [have] developed around dams,"" said Zhou. The dam brings jobs for the locals because of the project. The reservoir has brought more fisheries which are a bonus for locals to catch fish, Sreng Sataro, minister counselor of the Embassy of Cambodia in China, told the Global Times."

"It also brings roads that bring them to markets or take their children to better schools because of the project. But many of them are uneducated people who are easily misled by some Western-supported NGOs who only spread negativity. They do not realize how these infrastructure projects have brought people out of poverty and have provided them actual benefits until the contractor opened it for Cambodian tourists to visit in 2018,"" Sreng Sataro said. Sreng Sataro suggested the new projects financed under the MLC Special Fund have produced many tangible benefits in enhancing the livelihood and wellbeing of Cambodians.

Among these projects, Cambodia has benefited from 55 projects that support a broad range of cooperation activities in the field of rural development, community business creation, water resources, agriculture, education, and cultural heritage, among many others. ""The US and the institutions it backs have frequently been critical of China's investment projects in Mekong countries. But Australia, the US, Sweden, Norway, and other developed countries have reached more than 90 percent in the level of hydropower development.

The US even helped Canada build a dam upstream from Colombia, from which Colombia gets some revenue,"" Tian Fuqiang, a leading Chinese scholar and researcher on Mekong River water

resources from the Tsinghua University, told the Global Times, criticizing the US double standard.

"For gaining stable food and clean water, we believe that any cooperation mechanism that is genuinely willing to help can be welcome. But those who only play with words without actual action are unhelpful and even troublesome," said Zhong.

### **Fishermen in Cambodia resort to illegal methods to make ends meet**

<https://www.khmertimeskh.com/50859982/fishermen-resort-to-illegal-methods-to-make-ends-meet/>

"With Covid-19 rearing its head along the Mekong River, desperate fishermen in Cambodia have been resorting to illegal methods during the closed season to feed their families. Om Savath, an executive director of Fisheries Action Coalition Team (FACT) a non-governmental organisation (NGO) working on fisheries, environmental issues, and local fishing communities told Khmer Times that fishing offences have been more frequent than usual this year. However, Savath said that some protected areas supported by FACT have good protection measures in place to minimise these fishing offences.

We promote the closed and open fishing season every year, but some still abuse this because they rely on fishing to support their family, he said, adding that some offenders are being sent to court after ignoring multiple cautions. This year, we have seen more fishermen violating the seasonal fishing ban as they are struggling to make a living during the pandemic, thus some are using illegal equipment and fishing in protected areas to try and make ends meet, Savath said. He said FACT has worked very hard to help fishermen increase their income through ecotourism, but sadly the virus outbreak has forced them to do illegal fishing as tourism is minimal.

Boeng Be Pram Mouy community chief Eang Naim told Khmer Times that while fishing offences happen every year, this year the lake is also dry which has made the fish resources almost depleted. We cannot control the situation as we dont have enough resources to stop the illegal fishing and we are only able to patrol once or twice a month, Naim said.

Finance Manager and member of Phat Sanday ecotourism community So Phork told Khmer Times that people in his community are having a very hard time during the pandemic and are struggling to support their families.

Therefore, Phork said people are forced to fish during the closed season and in protected areas. People are allowed to fish in an area of 100 to 200 metres, however, some violate this to fish over 500 metres, which is illegal, he said. He added that fishermen have said 100 to 200 metres

is not enough for them to catch many fish, thus they have no choice but to expand the area in which they fish.

However, Phork said the community has financial support from FACT to conduct patrols in the protected areas to prevent illegal fishing and to keep the breeding fish safe. Last week in Stung Treng province, many fishing boats were stopped by authorities and more than 200 people were cautioned for violating the ban.

Stung Treng provincial Fisheries Administration deputy director Vong Savoeun said all fishermen have been informed not to use illegal fishing gear as well as to protect and conserve breeding fish during the natural spawning time. I urge all fishermen to immediately stop using illegal gear such as electric shock equipment, poisons and explosives that lead to the loss and extinction of fish resources as well as breeding fish, said Savoeun.

### **Fishing communities in Cambodia change focus after COVID-19**

<https://www.khmertimeskh.com/50841706/kraties-fishing-communities-change-focus-after-covid-19/>

"Fishing communities along the Mekong River who lost their jobs returned to relying on fishing in the hope of securing their livelihoods during the pandemic but face a recent decline in catches. In Sophea, 46, a fish seller in Anlung Preah Kor villager in Sambo district, Kratie province, who buys fish from other villagers to resell to make marginal profits, said, Nowadays, mostly I can only buy raised fish from my villagers while fish caught from the river are becoming fewer, he said. Prem Sam Ath, 52, a fisherman living along the Mekong River since 1993 in Vattanac village, Vattanac commune, Sambo district, Kratie province, commented: Fish are scarce this year. In the past, there used to be many fish and I used to catch, by casting a fishing net, big fish such as black shark minnow up to 30 or 40 kilogrammes a day.

Nowadays, I can hardly catch even two or three of them per day. The Ministry of Agriculture reported that household fisheries production dropped 18 percent from 326,500 tonnes in 2019 to 268,000 tonnes in 2020. Meanwhile, household fisheries production in Kratie province declined 29 percent from 6,200 tonnes in 2019 to 4,385 tonnes in 2020, accordingly to annual reports of the Fisheries Administration Cantonment of the Provincial Department of Agriculture, Forestry and Fisheries in Kratie province.

Further to the decline, 16 conservation organisations around the world claimed in a report on Worlds Forgotten Fish that populations of migratory freshwater fish have fallen by 76 percent since 1970 and mega-fish by 94 percent.

The report says the reasons for the decline are overfishing and destructive fishing practices, habitat destruction, hydropower dams on free-flowing rivers, over-abstraction of water for irrigation and domestic, agricultural, and industrial pollution. Losing their jobs after the COVID-19 crisis struck a number of people from Kratie's fishing communities had no choice other than to return home to their fishing community with the hope to earn a living by taking up fishing in the Mekong.

Contrary to their expectations, fishing has not helped to relieve their current difficulties because the number of Mekong fish has declined. WWF-Cambodia's community livelihoods developed a project called Improving food and income security of local people along the Mekong River funded by the Government of Germany (BMZ). Through this, WWF-Cambodia is working collaboratively with the Fisheries Administration Cantonment of the Kratie Provincial Department of Agriculture, Forestry and Fisheries and local authorities in Sambo district to support 22 community households in Sambo to start fish farming in ponds in order to help improve the livelihoods of the communities while also encouraging them in the conservation of natural resources, especially the Mekong's fishery resources.

Mok Ponlok, director of the Fisheries Administration Cantonment of the Provincial Department of Agriculture, Forestry and Fisheries in Kratie province said: As people in the communities faced such struggles, WWF-Cambodia worked collaboratively with officials from the Fisheries Administration Cantonment to introduce sustainable fish farming practices to the local communities by providing the community members with fish farming techniques, fingerlings and ponds to start fish farming so that they could improve their livelihoods while reducing illegal fishing activities.

In 2020, community patrol teams of 10 community fisheries in Kratie, supported by WWF-Cambodia, conducted a total of 478 patrols in the dolphin conservation areas of the Mekong, stopped 166 illegal fishing cases including 109 cases of illegal use of gillnets and 57 cases of electrofishing. The community patrol teams confiscated a total of 9,090 metres of gillnets, four electrofishing gears and three illegal fishing boats. In addition, they also educated 570 fishermen on the fishery law of Cambodia.

Besides supporting the communities with fish farming, WWF-Cambodia has also been supporting 511 families with a total of 2,760 members (1,518 women) in Kratie province to adopt sustainable jobs such as chicken farming, vegetable farming, raising cows and buffaloes, processing non-timber forest products (rattan and wild honey) and community-based ecotourism programmes to improve community livelihoods and prevent the destruction of natural resources. In 2020, those families earned an average of \$192 a month.

## **Climate risk management proves critical to sustaining food security in Cambodia**

<https://www.preventionweb.net/news/view/77202>

"A USAID-funded Cambodia fisheries project outperformed productivity goals after incorporating climate-sensitive design, including planning for increased risk of drought and extreme heat events.

The Feed the Future Cambodia Rice Field Fisheries I (RFF II) project boosts fishery productivity in the Tonle Sap floodplain. Project implementers employed systemic climate risk management (CRM) actions to improve biophysical conditions across 481 hectares, exceeding their target by 6 hectares. These improvements build the areas climate resilience by helping to protect fish habitats and diversity, maintain fish biomass, and secure water for drinking and irrigation. As climate change poses real threats to agricultural systems, CRM plays a crucial role in creating the sustainable and resilient practices necessary to achieve food and nutrition security goal. The project has helped build the capacity of communities to raise nearly \$270,000 for rice field fisheries management and conservation, according to USAID Cambodia.

Nearly 150,000 Cambodians produced and consumed more fish at home in 2020 than in the previous year due to climate-resilient measures undertaken by the RFF II Project, which succeeded in increasing fish production in spite of prolonged droughts in 2018, 2019, and 2020. From 2018 to 2020, farming households directly involved in RFF II (22,800 households) produced nearly 10 percent more fish per household in the 140 community fish refuges compared to 2017. And even in the broader zone of impact (123,000 households), fish production increased by a similar amount per household.

Overall, this resulted in an additional \$1.2 million in incomes in the 140 community fish refuges and almost \$5 million in increased incomes in the zone of impact over the baseline incomes. This result is even more remarkable considering the drought conditions that were repeatedly experienced during that same period, said Sothira Seng, USAID/Cambodia project management specialist. For example, a comparison of fish catches for the month of September showed a 39 percent decrease from 2019 to 2020 in surveyed rice fields within the zone of impact due to climate stressors.

Communities involved in the RFF II project applied CRM strategies to safeguard fish habitats when the shortened and delayed rainfall in 2018, 2019, and 2020 reduced rice field flooding and households' fish catch. Seasonal rice field flooding is a beneficial occurrence that helps sustain water levels for fish survival. Local residents adapted action plans in response to climate stressors, applying practices learned throughout the project to manage drought impacts on community fish refuges locally-protected bodies of water that prohibit fishing and provide a secure habitat for wild fish to breed and grow.

These included implementing drought abatement plans, organizing earthen dams to increase community fish refuge water storage capacity and improve connectivity of rice field fishery

ecosystems, and digging 47 rice field ponds around 13 community fish refuges to increase seasonal fish habitats.

These actions to address climate risks helped protect wild fish during critical periods, said Seng. The impact of drought and heat was considered during the projects design and translated to the expansion and deepening of community fish refuge ponds to ensure they had enough water year-round. Fish is an important dietary source for poor rural people in Cambodia, accounting for 61 percent of all households animal protein intake. Furthermore, 98 percent of floodplain residents participate in fishing activities.

To improve inland fish production in four provinces, the RFF II project depends on effective management of community fish refuges in collaboration with local nongovernmental organizations, community leaders, and implementing partner WorldFish. Fish migrate from rice field fisheries to community fish refuges during the dry season when water levels recede. At the start of the rainy season, fish migrate back to rice field fisheries and other connected bodies of water, such as canals and streams, where fishing is permitted. Wild fish from these rice field systems are free to catch, making them a particularly valuable protein source for impoverished, landless households.

Well-managed fish refuges led to a 71 percent increase in fish catch by the poorest households during the project's first phase, strengthening food and nutrition security for community members, according to Seng. RFF II project implementers analyzed climate stressors, including shortened rainy seasons and prolonged drought, that contribute to harmfully-low water levels in community fish refuges and hinder fish productivity and migration to rice field fisheries.

Furthermore, extreme heat during the dry season, when community fish refuge water levels are naturally lower, can lead to water temperature increases and additional water loss through evaporation, all of which threaten fish survival and some species fertility. RFF II developed strategies to address these climate stressors, reducing their negative impact on community fish refuge habitats and fish populations in the connected rice field fisheries. These efforts support a healthy fish stock for the community.

From the start, the RFF II project team took steps to proactively manage climate risks, including negative impacts of prolonged drought and heat on rice field fishery systems. In conjunction with the projects second year WASH (water, sanitation, and hygiene) activities, they began using climate risk screening tools to better understand how climate stressors threaten community fish refuges. Accordingly, the team developed strategies, such as expanding and deepening community fish refuges, to protect these critical water resources.

CRM actions like these help manage community fish refuge water levels, flow, and temperature, ultimately increasing the productivity of connected rice field fisheries. The project contributed to nearly 150,000 Cambodians consuming more fish at home in 2020 than in the previous year,



supporting RFF II goals to improve food and nutritional security for poor, vulnerable rural households, and particularly children.

### **Notes from the field: From fighting fires to cleaning seas, communities stand up for nature**

<https://www.conservation.org/blog/notes-from-the-field-from-fighting-fires-to-cleaning-seas-communities-stand-up-for-nature>

"Though news headlines about the state of the planet may seem bleak, they don't always capture the whole story. Right now, around the world, people are working on the ground to protect nature and achieving significant triumphs that don't make the news. Here are three recent conservation success stories you should know about.

1. In Colombia, local communities stand up for their forests Nestled in the southwest mountains of Colombia, Serranía El Pinche boasts a variety of unique amphibians, butterflies and flowers, as well as some 350 bird species 18 percent of the country's total. However, deforestation driven by the expansion of coca plantations, illegal logging and unregulated fishing over the past decade have ravaged the ecosystem, threatening the wildlife and natural resources that support more than 20 local communities in the area. Recently, these local communities banded together to protect the nature they depend on by establishing a 7,256-hectare (17,900-acre) regional forest reserve.

The communities are working with Fundación Ecohabitats, a grantee of the Critical Ecosystem Partnership Fund which is funded in part by Conservation International to manage the land and adapt to climate change. Ecohabitats has supplied farmers with specially designed greenhouses that allow them to produce food in periods of drought or heavy rain. Additionally, the organization financed the installment energy-efficient stoves in 15 households to reduce demand for firewood and improve the respiratory health of community women, who do the bulk of the cooking.

It is not only an opportunity to save wildlife; it is a chance for those who seek to change their lives, said Ecohabitats Executive Director Liliana Patricia Paz. Currently, Ecohabitats is working with the local communities to more than double the area of Serranía del Pinche Regional Protected Forest to span 19,186 hectares (47,400 acres) of land. The project has been implemented with support from the local Serranía El Pinche Agro-Environmental Association and the regional government.

2. Divers and rangers team up to clean ocean plagued by plastic Located at the intersection of five major ocean currents, the Galápagos Islands carry cold currents from the south and west and warm waters from the north, creating habitats for some of the planet's most unique species,

including sea lions, blue-footed boobies and green sea turtles. Unfortunately, these currents also pull in plastic and waste from every corner of the world.

Research shows that ocean pollution can significantly harm marine species and seabirds, who may confuse it for food or get tangled in it. To prevent this, a team of volunteer divers and park rangers recently removed more than 2 tons (5,000 pounds) of garbage in March from the Galápagos Marine Reserve a marine protected area nearly half the size of the total land area of Ecuador.

Led by the Galápagos National Park, in partnership with Conservation International, the divers and rangers worked in three of the islands largest bays: Academy Bay of Santa Cruz island, Shipwreck Bay on San Cristobal island and Villamil Bay on Isabela island. While the majority of the waste removed was plastic, volunteers also found discarded fishing nets, rusted iron and even boots, according to the Galápagos environmental ministry. Established in 2017, this annual clean-up program has removed a total of 42 tons (84,000 pounds) of waste. However, with nearly 8 million metric tons of plastic and waste dumped into the ocean every year, its going to take more than beach clean-ups to solve the marine plastic pollution problem.

Nearly 80 percent of the waste that pollutes the sea comes from land, so even if you dont live anywhere near the ocean, your trash if probably still finding its way there, said Edgardo Ochoa, the marine and diving safety officer at Conservation International in a recent interview with Conservation News. Reducing your plastic use is the most effective way to prevent new plastic from entering the ocean. Wherever you can, try to buy products that can be reused many times, such as food storage containers, bags and even face masks.

3. Fighting fires in Cambodias flooded forests Southeast Asia's largest lake, Tonle Sap in Cambodia more than quadruples in size during monsoon season, flushing the region with water and life.

Home to more than 1 million people, this floodplain supports one of the worlds most productive freshwater fisheries, providing roughly 500,000 tons (1 billion pounds) of fish each year. Additionally, the flooded forests purify water and buffer communities from storms. As climate change accelerates, however, Cambodias dry season is becoming hotter and lasting longer, leaving these flooded forests parched and vulnerable to wildfires.

Sadly, most of these fires are set by humans, and climate change is exacerbating the problem, explained Nick Souter, a freshwater scientist at Conservation International. Some are started accidentally as fishers leave cooking fires unattended, while others are started deliberately to clear land for agriculture. Regardless of their origins, wildfires can wreak havoc on these floodplains and the species they support threatening the livelihoods of fishers across the region.

To help control fires, Conservation International recently began a two-year project, with funding from the Critical Ecosystem Partnership Fund, to establish and run a community-based fire management program in three communities within and adjacent to the Tonle Sap.

Through the project, Conservation International experts will help train and equip local firefighters to suppress wildfires in their area, while supplying the resources and technical support necessary to reduce future flames.

The local people who depend on the flooded forest understand its importance, but don't currently have the resources and training to fight the fires that threaten their already tenuous livelihoods, said Souter. This project will help them manage and protect their land sustainably for future generations."

### **Chinese dams unleash Mekong waters on Laos during dry season**

<https://www.rfa.org/english/news/laos/dams-04052021175346.html>

"Chinese dams on the Mekong River have begun releasing water during the river's normal dry season, causing trouble for wildlife, farmers and fishermen in Laos, sources in the Southeast Asian country told RFA.

The Mekong River water level is up 12 centimeters [4.7 inches] from yesterday, an official of the Natural Resources and Environment Department of Laos' northwestern Bokeo province told RFA's Lao Service April 2. According to the official, the water level in Bokeo was at 2.52 meters (99.2 inches) on April 2.

I think the Chinese dams might be releasing water, but I'm not sure because I've not been officially informed, the official said. Fluctuating water levels in Southeast Asia's most important waterway pose threats to aquatic plants and fish, which thousands of people living along the Mekong in Laos rely on for their livelihood. A fisherman from Laos' northwestern Xayaburi province told RFA that a sudden change in water level was bad for fish stocks.

The Mekong River has risen about 10 centimeters [four inches]. I'm concerned that the rising water will affect aquatic vegetation and fish, the fisherman said. Before, the water was thick and rich in sediment. Now it is clear and has fewer fish. The fish are reproducing less and less these days. During this time of year, the fish lay their eggs, but when the water rushes through, it washes them all away, said the fisherman.

A farmer from the same province said the unpredictable water levels made his work difficult. The water level depends on Chinese dams, and the waterflow is not natural. It's hard to make a

living on the river these days, the farmer said. In the capital Vientiane, a vegetable garden owner told RFA that the increased water level was good for some industries but bad for others.

The water level is up by about one ladder step over the past two days. That's good for boat navigation, but bad for fishing and vegetable planting. I grow peanuts on a sand bed that is about to be flooded, the gardener said.

Montree Chanthawong, a Thailand-based Mekong River expert, told RFA that the river's water level is not supposed to rise during the dry season. The rising water could hurt aquatic species like fish and aquatic vegetation.

Some of them could even die. Sparrows lay their eggs on the sand beds too, and when the water level rises these can become flooded, he said. Nowat Roykaew, the president of the Thailand-based Chiang Khong Conservation Group, told RFA that water levels in the Mekong have been fluctuating since January.

Sometimes it goes up a lot like right now. I notice that the rising water is now clear. That means the water is coming from Chinese dams, because if it came from rain, it would be turbid. The water fluctuation has broken down the whole eco-system, he said. Data from the Washington-based Stimson Center's Mekong Dam Monitor project indicated that during the week of March 29 to April 4, five Chinese dams released water. Don Sahong Dam in southern Laos also released water during the same period.

During its update for the week of March 22-28, the Monitor said that river levels at Chiang Saen, Thailand had continued to rise. This is not normal for this time of the year and is a result of significant upstream dam releases from China's cascade, the update said, adding that releases would likely continue in the coming months.

The update also reported that Thai conservationists had recently posted photos of migratory bird nests and eggs along the riverbanks to show that a 50 cm (20 inch) rise in the water level would submerge the nests. That rise is likely to come over the next month given upstream releases.

This is just one example of how altering the river's natural cycle of dry season lows and wet season highs is killing the river's natural resource base, the update said. China has drawn criticism from its downstream neighbors for its cascade of 11 mega-dams on the Mekong River, with the lower Mekong basin experiencing severe drought over the past year and some stretches of the river even drying up entirely.

In October 2020, Beijing agreed to share data with the Mekong River Commission, as some 60 million people in MRC members Thailand, Laos, Cambodia, and Vietnam use the river for agriculture and fishing.

Neighbors of Laos have also complained about its nearly 80 dams on the Mekong River and its tributaries under the country's controversial economic strategy to become the Battery of Southeast Asia by selling hydropower to neighbors.

### **Are Cambodia's freshwater fish in trouble?**

<https://www.khmertimeskh.com/50824734/are-cambodias-freshwater-fish-in-trouble/>

"Destructive fishing and hydropower dams on free flowing rivers are two main reasons for the extinction of some freshwater fish in Cambodia including the Giant Barb and Isok, a report by World Wide Fund for Nature (WWF) revealed on Wednesday.

In addition to the two causes, the report highlights overfishing, habitat destruction, over abstraction of water for irrigation and domestic, agricultural and industrial pollution that are of threats to freshwater ecosystems where fish live. It also says that freshwater fish at risk from the introduction of invasive non-native species and the impacts of climate change as well as unsustainable sand mining and wildlife crime.

The report acknowledges the Mekong River as one of the world's most productive inland fisheries with over 1,100 species of fish. Giant Barb and Isok Barb are classified as critically endangered both globally and in Cambodia, while Giant Goonch, Mekong Tiger Perch and Elephant-ear Gourami are classified as endangered in the Kingdom.

Titled Worlds Forgotten Fishes , the report details the extraordinary variety of freshwater fish species, with the latest discoveries taking the total to 18,075 accounting for over half of all the worlds fish species and a quarter of all vertebrate species on Earth.

This wealth of species is essential to the health of the world's rivers, lakes and wetlands and supports societies and economies across the globe, it said. Seng Teak, country director of WWF-Cambodia said that despite their importance to local communities, freshwater fish are invariably forgotten. Freshwater fish matters to the health of people and the freshwater ecosystems that all people and all life on land depend on.

Its time that we should remember that, he said. It recorded that Cambodian people currently get around 16 percent of their animal protein and 28 percent of their lysine from freshwater fish from the Mekong River basin The 2017 Annual Fisheries Production Report by the Cambodian Governments Fisheries Administration showed that fisheries sector contributes eight percent of the countrys Growth Domestic Product (GDP).

In the report, it reveals that freshwater fisheries provide the main source of protein for 200 million people across Asia, Africa and South America, as well as jobs and livelihoods for 60 million people.

Healthy freshwater fish stocks also sustain two huge global industries: recreational fishing generates over \$100 billion annually, while aquarium fish are the world's most popular pets and drive a global trade worth up to \$30 billion. But accordingly, freshwater fish continue to be undervalued and overlooked and thousands of species are now heading towards extinction. Freshwater biodiversity is declining at twice the rate of that in our oceans or forests.

Indeed, 80 species of freshwater fish have already been declared Extinct by the IUCN Red List of Threatened Species, including 16 in 2020 alone, the report added. Meanwhile, populations of migratory freshwater fish have fallen by 76 percent since 1970 and mega-fish by a catastrophic 94 percent.

Stuart Orr, WWF global freshwater manager, said nowhere is the world's nature crisis more acute than in rivers, lakes and wetlands, and the clearest indicator of the damage people are doing is the rapid decline in freshwater fish populations. They are the aquatic version of the canary in the coalmine, and we must heed the warning, he said.

He added: What we need now is to recognise the value of freshwater fish and fisheries, and for governments to commit to new targets and solutions implementation, as well as prioritising which freshwater ecosystems need protection and restoration.

He also stressed the need to see partnerships and innovation through collective action involving governments, businesses, investors, civil society and communities. Cambodia's correct decision is an example for other countries, recognising free-flowing rivers provide invaluable benefits for people and countless wild species that depend on, said Teak.

According to the WWF, the government's decision in imposing a 10-year moratorium of hydropower dams on the mainstream of the Mekong River has been praised and factoring freshwater fishes into development decisions are the best management practise the government has done which needs to be the rule.

### **Cambodia's dwindling fish stocks put spotlight on changing rivers**

<https://www.channelnewsasia.com/news/asia/cambodia-fishermen-mekong-river-dwindling-fish-stocks-14358640>

"Cambodian fisherman Tin Yusos tucks into a meal of the previous day's catch with his wife and granddaughter aboard a boat which doubles as their home moored by the banks of the Tonle Sap River. They plan to set out for another day of fishing in the area of the Tonle Sap and Mekong rivers, though his expectations are low." "There are no big fish anymore," said Tin Yusos, 57. In the past, he could get a haul of about 30kg of fish a day. Now he often catches just more than 1kg, worth about 15,000 riel (US\$3.69).

Experts blame hydropower projects, sand mining, deforestation, wetland conversion and climate change for dramatic drops in water levels in the region's rivers, severely disrupting fishing and threatening food supplies for millions. The Mekong typically swells in the rainy season where it converges with the Tonle Sap River, causing an unusual reversed flow into the Tonle Sap Lake, filling it up and providing bountiful fish stocks.

But in recent years, the flows to Southeast Asia's largest lake have at times been delayed, a factor blamed on drought and hydropower dams upstream on the Mekong. Whether or not China's 11 dams are harming downstream countries dependent on the 4,350km river has become a geopolitical issue, with the United States urging Lower Mekong nations like Thailand, Vietnam and Cambodia to demand answers. Marc Goichot, an expert on the region's waterways at the World Wide Fund for Nature (WWF), said dams and sand mining in particular can contribute to a loss of fish."

"Basically the entire system is under stress and changing," he said. "We need to address the root causes of those changes and re-establish the key processes like movement of fish." Ly Safi, 32, another Cambodian fisherman, said that this year's catch had been his worst and he felt trapped in a livelihood with little future. "Some fishermen could save up some money and have left to do businesses on land, but for us we can't."

### **Mekong river at worrying low level amid calls for more Chinese dam data**

<https://www.hindustantimes.com/world-news/mekong-river-at-worrying-low-level-amid-calls-for-more-chinese-dam-data-101613137861375.html>

"Water levels in the Mekong River have fallen to a "worrying level" in part due to outflow restrictions from Chinese hydropower dams upstream, the Mekong River Commission (MRC) said on Friday, calling on Beijing to share all of its water data. The vital waterway has turned blue along the Thai-Laos border, from its usual murky brown colour - signaling shallow water and low levels of nutrition-rich sediment - partially from outflow restrictions from the Jinghong dam in China's Yunnan province, the inter-governmental MRC said. Friday's statement said low rainfall and dams on the Lower Mekong and tributaries also contributed to the drop in levels."

"There have been sudden rises and falls in water levels immediately downstream of Jinghong and further down to Vientiane," said Winai Wongpimool, director of the MRC Secretariat's Technical Support Division. Such fluctuations affect fish migration, agriculture and transportation that nearly 70 million people rely on for their livelihoods and food security."

"To help the Lower Mekong countries manage risks more effectively, we call on China and the Lower Mekong countries themselves to share their water release plans with us, Winai said. The

MRC said normal conditions may be restored if large volumes of water are released from Chinese dams' reservoirs.

China's Ministry of Foreign Affairs disputed the MRC's findings, adding that there are many causes of downstream drought. China last year pledged to share data from its dams with MRC member countries Laos, Thailand, Cambodia and Vietnam. In January, Beijing notified neighbours that its dams were filling reservoirs until Jan. 25.

Outflow levels at Jinghong Dam were 785 cubic metres per second in early-January before rising to 1,400 cubic metres per second in mid-January, the MRC said. However, levels dropped again in February and were 800 cubic metres per second as of Thursday, the MRC said.

The statement did not mention any recent notification from Beijing. China said the dam's outflow has been consistently more than 1,000 cubic meters per second since the end of January, a level it says is nearly twice the natural flow of the river. It called on the MRC ""to avoid causing public misunderstanding"".

### **COVID-19 slowing Cambodia's fight against hunger**

<https://theaseanpost.com/article/covid-19-slowing-cambodias-fight-against-hunger>

"Hunger is an issue that has long plagued a number of countries in Southeast Asia. Cambodia, a developing country between Thailand and Vietnam, remains one of the poorest nations in the region. But, in recent years, Cambodia has made notable progress towards improving citizens nutrition. This can be seen from the reduction of childrens stunting occurrences (low-height-for-age) from 42 percent in 2005 to 32 percent in 2014.

The kingdom's poverty rate had also decreased from 53 percent in 2004 to 13.5 percent in 2014. It is now expected to be below 10 percent. Since the end of the Khmer Rouge in 1979, organisations such as Action Against Hunger and the World Food Programme (WFP) have helped vulnerable Cambodians meet their emergency needs and have access to nutritious, safe and diverse foods. Moreover, in a bid to meet its goal of ending hunger in the kingdom by 2030, the government in collaboration with the WFP created programmes to promote access to nutritious diets within Cambodia. An example of this is the WFP-supported home-grown school feeding programme.

Despite the progress, a 2018 World Vision report noted that the number of Cambodian children under five suffering from malnutrition has remained high with 32 percent of them showing signs of stunting, 24 percent being underweight and 10 percent being wasted. In the Ending Malnutrition in Cambodia Is Possible report, the organisation cited diarrhoea as a result of poor sanitation in households and the community as the primary cause of malnutrition in the kingdom.



When children experience repeated bouts of diarrhoea accompanied by food that has low nutritional value, they can become chronically malnourished. However, with the coronavirus pandemic which has severely affected livelihoods across the globe, the problem of malnutrition in Cambodia appears grimmer.

Nutrition Affected The State of Food Security and Nutrition in the World report published in July 2020 by the United Nations (UN) states that nearly 690 million people went hungry in 2019, or 8.9 percent of the world's population. This is an increase of 10 million from 2018 and 60 million in five years. The report also expected the pandemic to tip over 130 million more people into chronic hunger by the end of 2020.

A more recent joint-report released by UN agencies the United Nations Children's Fund (UNICEF), Food and Agriculture Organization (FAO), the WFP, and the World Health Organization (WHO), stated that the pandemic is threatening access to a healthy diet for nearly two billion people in the Asia-Pacific region. Malnutrition is simply the result of not having enough to eat. However, a child or an adult can have enough food to eat and still be poorly nourished if they do not eat the right foods at the right times.

Titled Going hungry how COVID-19 has harmed nutrition in Asia and the Pacific, the report noted that more than half of households in Cambodia have at some point had to cut back on the size and quantity of their meals as an effect of the pandemic causing setbacks in the fight against malnutrition. Sometime early last year, food prices particularly for meat, eggs, and fish products in Phnom Penh, and fresh vegetables in provincial markets increased. Although prices have since stabilised, many households decreased their food intake and diet diversity in important food categories such as products rich in protein, vitamin A and iron. The report stated that in August 2020, 30 percent of Cambodian women's diets failed to reach minimum diversity.

Unfortunately, this then increased to 50 percent by November. Malnutrition has been a long-term challenge in Cambodia, one recognised by the government and its development partners. Much progress has been made in the last decade, but COVID-19 is putting that progress in jeopardy, said Foroogh Foyouzat, UNICEF's representative in Cambodia. Echoing UNICEF, the FAO also stated that dealing with COVID-19 has led to setbacks in the fight to end hunger and malnutrition, despite some countries in the region including Cambodia having only recorded double to triple-digit COVID-19 infections.

Back in September 2020, FAO offices in Cambodia and countries in the Asia-Pacific region participated in a four-day virtual conference to address the twin pandemics of COVID-19 and hunger facing the region. We must come to terms with what is before us and recognise that the world and our region has changed, said Jong-Jin Kim, FAO's regional representative for Asia and the Pacific. We must find new ways to move forward and ensure sustainable food security in the

face of these twin pandemics, as well as prepare for threats that can and will evolve in the future, he continued.

As an effort to reduce hardship and meet needs, the government of Cambodia expanded its social cash transfer programme to more than 600,000 of its most vulnerable citizens. However, as stated in a joint press release by UN agencies, more investment is required to further expand social assistance and ensure improvements are made to food systems to increase access to nutritious foods, boost productivity, improve food safety, and protect employment, while stimulating demand for domestically produced foods.

### **This Thai village created a tiny fish reserve years ago. Today, its thriving**

<https://www.nationalgeographic.com/environment/2021/01/thai-village-created-tiny-fish-reserve-25-years-ago-today-its-thriving/>

"PEOPLE in Na Doi, a quiet village in northwest Thailand, noticed that their fish catches in the nearby Ngao River were declining. The fish they did manage to net were also getting smaller. Together, Na Doi's 75 households decided to try a radical solution: they would set aside a small stretch of river to be strictly off-limits to fishing. Nearly a quarter-century later, the experiment has paid off. The protected section of the Ngao brims with large barb and mahseer (a kind of carp), and catches outside of the reserve, where the villagers fish, have significantly increased. The projects shared ownership has created a greater sense of harmony and unity among villagers, and has benefited them individually, psychologically as well, says Nok Wa, 55, a farmer in Na Doi. Many times, when people in the village are upset, they go to watch the fish, he says. Sometimes the young children ask why we can't eat those fish, and I tell them, "Our stomachs cannot eat those fish, but our eyes can still eat. Na Doi was the second village in the Ngao River valley to adopt this pioneering approach to freshwater fisheries management. Since the late 1990s, at least 50 other villages there have done the same. As a whole, the entirely grassroots-led reserves have been stunningly successful, according to findings recently published in Nature.

Most importantly, the Thailand case study provides probably the best real-world proof of concept that fisheries reserves can benefit not just oceans, but freshwater, too. These small, community-based reserves can be a really effective management strategy for sustaining their own resources and conserving fish, says Aaron Koning, a postdoctoral researcher at the Global Water Center at the University of Reno, Nevada, and a National Geographic explorer.

This is some of the first science to show that this approach is really effective in freshwater, and suggests that we should maybe start applying this as a conservation tool. A much-needed break. Such tools are desperately needed. Freshwater animals are declining at rates more than double those of land and marine ones, yet they're chronically overlooked.

Their habitats in many rivers are affected by myriad threats: from dams and irrigation diversions, pollution, sand mining, and invasive species. While freshwater reserves will not solve everything, in places where fish populations are under pressure, they can give species much-needed breathing room to rebuild their numbers, ultimately making them better able to weather other environmental assaults.

Larger populations are less likely to go extinct than smaller ones, and are also more adaptable due to higher genetic diversity. Freshwater reserves provide a tool that could buy us some time to start addressing much larger conservation strategies, Koning says. Southeast Asia, which has rivers and lakes that are some of the most heavily fished in the world, also has a long history of self-governed freshwater reserves, usually established as sacred pools around religious temples.

The first Ngao River valley community reserve was established in 1992, and slowly, other villages observing the success of their neighbors replicated the project. The rules are usually simple: no fishing of any kind in an agreed-upon area demarcated by flags or signs. Punishments for violators vary. In Na Doi, for example, fines start at 500 baht (about \$17) per fish, regardless of the animal's size, and increase for subsequent offenses. In another village, rule breakers must pay with 12 bottles of whiskey and a pig sacrifice to appease the spirits.

Accidental networks In 2012, Koning, then a doctoral student at the University of Wisconsin, Madison, began investigating the Ngao valley reserves to see how widespread and successful they truly were. Over the next eight years, he spent a total of 18 months living with communities across the region, where he documented around 50 different reserves. He selected 23 to study in depth, interviewing villagers and snorkeling the waters inside and outside the reserves to count and measure fish, along with study co-author Martin Perales.

Koning found, not surprisingly, that older and bigger reserves were more successful, because they offered more time and space including more kinds of habitat in which to rebuild fish populations and re-establish rare species. But even reserves established in the last couple years showed clear benefits from being spared intense fishing pressure. Reserves that were located closer to a village tended to have an advantage, Koning says, probably because villagers were better able to enforce the rules.

These principles have been much more fully developed and demonstrated in marine reserves, but we think that's what might be driving the success that we saw in our study, too, Koning says. While some of the reserves are laughably small, he says just the size of a kiddie pool they are all relatively close together, inadvertently providing a network of safe havens for fish species that travel up and down the river and its tributaries, in addition to those that stay put.

The magnitude of the overall benefits is really surprising, Koning says. He and his colleagues reported that, compared to non-protected stretches of the river, reserves enjoy more than twice

the total number of fish and over 20 times the total weight of fish, with big fish found almost exclusively within protected areas.

This is the first time we have had such a high-profile, quantitative study that directly measuring the benefits of freshwater protected areas, says Erin Loury, a fisheries biologist at FISHBIO, a global fisheries and environmental consulting company, who was not involved in the research.

The fact that communities did this on their own with very little external support or funding is quite remarkable and is the best-case scenario you could hope for. Hard-to-see successes In follow-up studies, Loury would like to see an in-depth analysis of the social factors that contributed to the communities accomplishments. She wonders, for example, if the Thai reserves benefited from the fact that villagers could literally see their successful efforts swimming around in the clear waters of the Ngao River.

When freshwater bodies are turbid which many are the gains from fishing limits may be harder to convey. Since the study came out, Koning has received reports about similar initiatives in Malaysia, India, and Namibia. Conservationists have also contacted him about replicating successful aspects of the Thai case study in various countries in South America and Southeast Asia. At the same time, he has begun researching the effects of eight large, government-mandated, no-take zones established in 2013 in Cambodia's Tonle Sap Lake, a hugely important fishery where reports indicate fewer and smaller fish are being caught.

By comparing different systems and approaches around the world, Koning and his colleagues hope to identify common factors for success that could be tailored to diverse rivers and lakes. There's a ton of mystery still in how and why these things work, but the first lesson is that they do work, Koning says.

It's a message that Nok Wa heartedly endorses as well. If we didn't have a reserve, our children wouldn't be able to see fish, and we wouldn't have fish to eat, he says. If a community starts a reserve, they will definitely get more fish.

### **Illegal fishermen volley between Cambodia and Vietnam**

<https://www.khmertimeskh.com/50809922/illegal-fishermen-volley-between-cambodia-and-vietnam/>

"Vietnamese and Cambodian fishermen are still illegally fishing in each others territorial waters in Kep province, even though authorities have attempted to crack down on it, an official said yesterday.

Theng Borin, director of the provincial Department of Agriculture said at a press conference that recently, local authorities observed there is still illegal fishing in Kep province which is destroying natural resources such as coral reefs and clam habitats.

In the past, Vietnamese fishermen came for subsistence fishing not using large-scale commercial boats with electric equipment, because the water in the border area is just two to four metres deep. It is not possible for a boat larger than twelve metres, he said.

Borin said the provincial authorities cooperate with Marine Conservation Cambodia and the border police to prevent illegal fishing. He said that in 2020, Vietnamese authorities arrested 25 Cambodian fishermen caught fishing illegally in the border area.

Cambodian officials requested their release and the governor of Kep province went to repatriate them. He educated them not to continue illegal fishing before sending them home, Borin said. He said that when there is illegal fishing in Cambodia, authorities detain the Vietnamese fishermen. At the request of the Vietnamese authorities, we release them and send them back to Vietnam, Borin said.

### **Cambodia's fisheries authority bans short mackerel fishing**

<https://www.phnompenhpost.com/national/fisheries-authority-bans-short-mackerel-fishing>

"The Fisheries Administration under the Ministry of Agriculture, Forestry and Fisheries will close fishing for short mackerel in Cambodian waters from January 15 to March 31 this year, according to an announcement seen by The Post on January 10. It said the reason for the closure is the onset of the short mackerels spawning season and that the Fisheries Administration strictly prohibits fishing for short mackerel known by its scientific name *Rastrelliger brachysoma* in its territorial waters during spawning in order to preserve and protect Cambodia's marine fisheries resources.

Kampot provincial Fisheries Administration chief Sar Sorin told The Post on January 10 that officials had circulated the announcement in the fishing communities along the coast to make them aware of the ban.

We educate and guide them to understand the importance of why we close down fishing during spawning season, and we advise them to change their fishing equipment to catch something other than short mackerel, because there are a lot of other fish [species] in our seas, Sorin said.

According to Sorin, the 2020 total catch for marine fishing in Kampot province was approximately 22,000 tonnes, down 10 per cent compared to 2019. Freshwater fishing in the province added up to roughly 6,500 tonnes while aquaculture or fish farms added about 4,000 tonnes.

The main reason for the [ocean fishing] decrease was bad weather. There were too many storms. Another reason was Covid-19, which reduced the number of people fishing because overall demand was reduced due to the lack of tourists, he said. Preah Sihanouk provincial Fisheries Administration director Em Phea said the large commercial fishing boats typically observe any fishing bans put in place by the ministry.

However, he said some people who have smaller fishing boats to support their family will continue to fish for short mackerel secretly. When they bring in their fish we inspect them and if we see that they have short mackerel we first make them sign a letter promising to stop fishing for them. If they are stubborn and repeat the offence, then we will take legal action, Em Phea said.

According to Em Phea, total fishery output in 2020 for Preah Sihanouk province had not decreased at all compared to 2019. He said the total fishing haul was 47,322 tonnes in 2019 and 48,812 tonnes in 2020 an increase of about two per cent. According to the agriculture ministry report in 2020, Cambodia produced 936,300 tonnes of fishery products, including more than 410,000 tonnes of freshwater products, more than 120,000 tonnes of marine products and more than 400,000 tonnes of aquaculture products.

### **Mekong Migration Network statement on the Outbreak of COVID-19 among Migrant Workers in Samut Sakhon**

<http://www.mekongmigration.org/?p=18630>

"The recent spike in coronavirus (Covid-19) infections recorded in and around Samut Sakhon is alarming to the Mekong Migration Network (MMN) on multiple levels. We are particularly concerned about the potential negative impact of Prime Minister, Prayut Chan-o-chas remark that this latest flare up is primarily due to illegal immigrants who have brought much grief to the country. This follows the earlier comment by the Minister of Public Health, Anutin Charnvirakul that the source is likely migrant workers . Rather than seeking a scapegoat, the current outbreak, centred on Samut Sakhons Central Shrimp Market, brings into sharp focus the disproportionate impact that the pandemic is having on the livelihood and health of Thailand's much maligned migrant workers.

The seafood industry in Samut Sakhon, like elsewhere in Thailand, is hugely dependent on the low paid labour of migrants from Myanmar and Cambodia who live and work in conditions where physical distancing and recommended hygiene measures to prevent the spread of Covid-19 are largely absent.

In recent research conducted by MMN member, The Raks Thai Foundation, which included respondents from Samut Sakhons seafood industry, migrants reported that very few employers

imposed social distancing rules, provided PPE, checked temperatures before work, or used a rota system to limit the number of staff in the workplace at any one time.

The current outbreak is a product of the heightened risks faced by migrants due to their precarious working conditions and marginalisation from wider Thai society. MMN takes the view that Covid-19 preventative measures will only be successful if all of Thailand's diverse migrant communities are engaged in the response, and are treated fairly without discrimination.

It is counterproductive to point the finger at migrants or scapegoat them as the source of the outbreak, since the current public health emergency requires collective action that is only possible when no one is left behind.

Migrants are also fearful of being locked down or quarantined in cramped, overcrowded conditions. It should be noted that many of the current difficulties containing the outbreak within the migrant community are rooted in a lack of coherence in policies that impact the lives of migrants.

Although many Thai policies in the field of social protection are relatively progressive in their treatment of migrants, implementation is often hamstrung by restrictive immigration policies that treat migrants as temporary workers.

This in the face of the reality that a great many migrant workers have lived for years, if not decades, in Thailand and consider it their permanent home. To tackle the current outbreak in Samut Sakhon, public health must be prioritised, and migrants must be assured that test, trace, and treatment for Covid-19 will be carried out at arms length from the immigration authorities. Without a firewall between immigration enforcement and the Covid-19 response, migrants will be fearful of any contact with the authorities.

Such an outcome will have serious implications for the Ministry of Public Health's ability to control the outbreak. We commend the words of Samut Sakhon Vice Governor Surasak Phonyangsong in remarking that Myanmar migrant workers are also human beings who deserve to be treated with humanity regardless of their immigration status.

Recommendations In light of the above challenges, MMN calls on the relevant authorities to implement the following recommendations as a matter of urgency: 1. For the Ministry of Health to publicly announce and put in place measures to ensure that all migrants in Thailand, regardless of their immigration status, can access free public healthcare in relation to the diagnosis and treatment of Covid-19. 2. For the relevant Thai authorities to publicly announce that a person's immigration status will not be checked when they approach healthcare service providers for a test or treatment for Covid-19 and that all personal data will be treated in the strictest of confidence with an undertaking that immigration enforcement action will not be pursued against those who come forward.

3. For the Ministry of Public Health to ensure that all migrants in Thailand are accommodated, free of charge, in appropriate quarantine facilities where such action is deemed necessary. 4. For the Ministry of Interior, Ministry of Labour, and Ministry of Public Health to urgently work towards a cohesive social protection package that catches all migrants, regardless of their immigration status, before they fall into destitution as a result of the health and economic impact of the pandemic.

5. For the Ministry of Interior and the Ministry of Labour to pass special measures to facilitate the extension of visas and work permits, and provide amnesty to those who have fallen out of the system. 6. For the Ministry of Labour to strictly enforce Covid-19 safety measures in all workplaces, and that employers provide their employees with protective equipment such as masks and alco gels for free. 7. For the Ministry of Labour to ensure that all employees, including migrant workers, receive paid sick leave during any quarantine and/or treatment period.

8. For the relevant authorities in Thailand and countries of origin to work together towards a public health and humanitarian response for border crossers, with efforts geared towards encouraging regular migration channels by providing affordable quarantine and health check measures at border entry points. 9. For the relevant authorities in Thailand and countries of origin to mount a far-reaching coordinated public information campaign aimed at migrants to inform them of important matters relating to the Covid-19 pandemic in appropriate migrant languages.

Such information must include: preventative measures to stop the spread of Covid-19; what to do and how to contact the health authorities in the event of falling ill; immigration updates, including information on border closures; how to social distance and self-isolate; quarantine requirements; and relief measures available for migrants in case of sudden loss of income. 10. For the relevant authorities in Thailand and countries of origin to provide accurate information about the pandemic to the general public, and take a clear stance against any stigmatisation and discrimination against migrant communities.

For all the above, MMN urges the governments of countries of origin to actively reach out to their nationals, and closely coordinate with the relevant Thai authorities as well as NGOs to ensure that timely support is provided to all those who are in urgent need.

Moreover, we reiterate our repeated calls for the Association of South East Asian Nations, ASEAN, to work in unity and provide a coordinate response regarding the movement of people in ways that will reduce the potential of virus spreading events while maintaining the dignity and rights of migrants.

We emphasize once again the urgent need for portability of social protection in the region.

ABOUT THE MEKONG MIGRATION NETWORK Founded in 2003, the Mekong Migration



Network (MMN) is a sub-regional network of civil society organisations and research institutes working towards the protection and promotion of the rights of migrants and their families in the Greater Mekong Sub-region.

MMNs areas of joint action include collaborative research, advocacy, capacity building and networking. MMN members operate in both countries of origin and destination, have unique expertise in the field, and are in close contact with migrant workers at a grassroots level. For more information on MMN, please visit MMNs webpage at: [www.mekongmigration.org](http://www.mekongmigration.org)

### **Female fishery activists play a key role in Cambodia**

<https://www.khmertimeskh.com/50784633/female-fishery-activists-play-a-key-role/>

"In the Khmer folktale "Phnom Chiso Temple, a Hindu priest gives blessings to a Khmer prince, saying: "May you be as strong as an ant, as mighty as a ghost and as decisive as a woman. Following this as an example, after fishery communities were established in Kampong Cham province's Kang Meas district, the head of the communities decided to invite women to join to help with the conservation work.

Ky Sopheap, a 50-year-old mother from Kang Taneung commune, seems to bare such a character like the Hindu priest portrays women in the folktale when she does her work as a fishery activist. "I decided to become a fishery activist because there are not many women who help crack down on illegal fishing, she says with pride. "This is also to show gender equality and to show that women can also do work like men.

Sopheap says she is the only female among six fishery activists in her commune's fishery community. "When I have accompanied male fishery activists to confiscate illegal fishing nets, the police were proud of me and some even gave me money, she says, adding that her team has recently confiscated and burned 16 illegal nets. Sopheap says illegal fishermen fight back every time the fishery community cracks down on illegal fishing activities. "We've met a lot of obstacles, she says, "but I am not scared. She says sometimes illegal fishermen tried to crash their boat into the fishery community's boat and even wielded machetes to threaten her team.

"I told them: 'You are doing illegal activities, so we must confiscate your fishing nets', she says. However, she says police officers and fishery officials would join the patrol each time when the fishery activists searched for illegal fishing activities. "[Illegal fishermen] shouted 'How dare you! Aren't you afraid that your rice fields will be burned down?'" she says.

Sopheap says the district authorities noticed her active participation in social work and appointed her to work on the Kang Taneung Commune Council to solve disputes. "I am happy with my work, she says. "I hope there will be more fish in the future.

Like Sopheap, 30-year-old Say Sidoeun from Sdao commune has also joined her husband to help the fishery community. She says she and her husband have volunteered to stay at a kiosk to guard a conservation lake at night. “Sometimes, I am worried about my two small daughters, she says. “I am afraid they will fall into the water.

Apart from fishing, Sidoeun says she and her husband do odd jobs to supplement their income to feed their family. “We told illegal fishermen that they should use legal fishing tools to catch fish, she says, “If you cannot catch enough fish, you can do construction work to earn more money.

Kang Chheng Korn, in her late 40s, says she has joined the fishery community but that she only handles financial work to make sure that the fishery activists have money to buy boats, life jackets and other tools needed to do their work. In addition, she says as a teacher she has also helped educate villagers and children about conservation and the environment.

“If we don't educate people and children, there will be no fish in the river in the future, she says. Eang Nam, head of the fishery communities in Kang Meas district, speaks highly of the female fishery activists. “They work very hard without any salary, he says, adding that an activist receives \$2.50 to buy water and snacks when they go on a patrol. Nam says fishery communities were established by the Fishery Department across Cambodia in 2000. There are 22 fishery communities in Kang Meas district alone.

“Out of around 1,000 fishery activists, between 200 and 300 activists are women, he says. The head of Kang Meas district fishery communities says the activists have been trained on conservation, environmental protection, gender awareness and reporting. He says the Earth Journalism Network through the Cambodian Environmental Journalism Network has recently trained a group of fishery activists on how to work safely and how to report to the media and authorities on illegal fishing activities and environmental issues in general.

“Female activists rarely join crackdowns on illegal fishing, he says, adding that many of them just help with making reports. Despite their work for 20 years, Nam says illegal fishing activities continue due to insufficient crackdowns and a lack of cooperation from local authorities.

“Sometimes, the authorities do nothing when we report illegal fishing, he complains. “That's why illegal fishing is still happening.

However, he says the work of fishery communities is still needed to slow down illegal fishing activities. “It's better to have such fishery communities than not having them, he says.

“Otherwise, illegal fishing activities will happen at will.

Chhay Chhom, chief of Kang Meas district's Kang Taneung commune, acknowledges that illegal fishing has happened in his commune and other communes across Kampong Cham province.

“We have a lot of work to do. We cannot keep an eye on all illegal fishing activities, he says. However, Chhom also admires the work of the fishery communities in helping stop illegal

fishing activities. “It is a good thing for my commune to have fishery communities and fishery activists, he says.

### **Amid drought and flooding, Cambodian fish catches, exports fall precipitously**

<https://thediplomat.com/2020/10/amid-drought-and-flooding-cambodian-fish-catches-exports-fall-precipitously/>

"For two decades, scientists and environmentalists have warned that fish stocks in the Lower Mekong River were at risk from a cluster of factors including overfishing and use of illegal nets, massive dam construction in Laos and China, and the effects of climate change. And now the numbers appear to support those warnings, with Cambodian fish exports for the first nine months of the year slumping 84 percent year-on-year, while fish catches are down about 70 percent over the same period.

Numbers obtained from the Ministry of Agriculture and published by Voice of Democracy (VOD) show that fresh fish exports fell from 5,502 tons to just 1,498 tons, as the export of processed fish products fell precipitously, from 5,000 tons to just 232 tons.

The ministry had aimed to export 15,000 tons of fresh fish this year, and the VOD report quoted local fishing associations as saying the catch for the year to date was down around 70 percent. About 70 million people depend upon the Mekong River as their chief source of protein and live hand to mouth, and in Vietnam 50 percent of agricultural GDP is derived from the river.

Until the recent floods, water levels in the Mekong River had been sitting at record lows as fishermen complained bitterly that their fish catches had been reduced to about a kilogram a day, compared with 20 to 30 kilograms a day in years past.

Worryingly, at least 11 dams are planned for the mainstream of the Mekong River. A further 123 are in the works for its tributaries; however, the Washington, D.C.-based Stimson Center believes more than 400 dams are planned.

It has also accused China of hoarding water in its cascade of dams on the upper Mekong, a charge Beijing rejects. Vietnam, Laos, Cambodia and Thailand have been inundated by floods in recent weeks, leaving more than 100 people dead while displacing hundreds of thousands more. Adding insult to injury, China recently warned downstream countries to brace for sudden water releases from its dam reservoirs, which are now full.

It is too early to tell whether the floods will end the long-running drought in the lower Mekong region. But the deluge will not resolve issues with fish migration and spawning patterns or rising salinity from the South China Sea, which is reaching ever further into the Mekong Delta, destroying freshwater habitats. It's a situation that has raised the prospect of a collapse in fish

stocks with as many as 850 species of fish that once thrived, including the Irrawaddy dolphin and the giant catfish, now endangered.

In releasing the latest fish catch figures, Agriculture Minister Veng Sakhon said the decline in fish exports would not impact on the economy because the quantities were already small. "The important reason, as we know, is that the Tonle Sap is lower than before, because there is the problem of less water flowing from the Mekong, Sakhon said. "The amount of natural fish is less than before. So [exports] decline too, because buyers prefer natural fish.

That's a defeatist attitude which measures success or failure on an annual basis while ignoring the true value of the Mekong River and its delta, where total fish harvests were valued \$11 billion a year by the fisheries and development newsletter Catch and Culture in 2015.

Lost exports and poor harvests stemming from drought, floods and man-made alterations to the river could equate to billions of dollars in losses when compared with even five years ago. That can only spell further hardship for the fishermen left plying the falling waters of the Mekong.

### **UN says global goals to protect nature need women to succeed**

<https://news.trust.org/item/20200915173711-66lp0/>

"Women - who gather much of the world's wood and water, and carry out a large share of its farming - have too little say in how land is used, one key reason countries are failing to halt rapid losses of nature, environmental officials said on Tuesday. Giving women a bigger voice in decision-making ""is essential to achieve our biodiversity goals"", said David Cooper, deputy executive director of the U.N. Convention on Biological Diversity (CBD).

The United Nations released a sobering update on global efforts to protect forests, plants, wildlife, fish and other forms of nature, noting that none of the 2020 goals countries set themselves a decade ago had been fully met." "The capacity of ecosystems to provide the essential services on which societies depend continues to decline, "" with women and poor communities worst-affected, the report noted.

Losses of native plants and forests, which help support rainfall and stem erosion, have hit crop yields and access to water, fuel-wood and plants used as natural medicines, it said. About half of the world's people are expected to live in water-scarce areas by 2050, especially in Asia, it added, while floods and soil erosion are increasing as land degrades.

Inger Andersen, executive director of the United Nations Environment Programme, said women often controlled seed stocks and made plant-based medicines, and harm to nature curbed their ability to manage health, nutrition and farming." "To a poor woman in a rural setting who is

managing this (loss), it becomes very real," she told an online briefing. While 164 countries recognise women's rights to own, use and make decisions about land equally with men, only 52 guarantee those rights in both law and practice, the report said.

Julie Weah, executive director of the Foundation for Community Initiatives in Liberia, said that in her experience women were denied ownership of and participation in the governance of natural resources in their communities. "Even if they are on (committees), they are not occupying decision-making positions," she told the Thomson Reuters Foundation.

"If they play a key role in deciding how to manage our wildlife and biodiversity, we'll see a wider change," she predicted, noting that women often have the interests of their children and the wider community at heart.

Women in Liberia who helped shape decisions on how to spend money from logging concessions, for instance, have in some cases devoted it to scholarships for girls, and stepped up on reporting illegal mining and logging, she said.

In the Peruvian Amazon, indigenous women are taking the lead in tree planting and joining forest-monitoring patrols in bigger numbers, said Josh Lichtenstein, a Latin American forest and indigenous expert with the Rainforest Foundation US.

Widows of murdered indigenous land protectors in Peru's Amazon also have led a groundbreaking push to bring to account their killers, with the case set to be heard before the Inter-American Commission on Human Rights in October, he noted.

"Women have a much closer relationship with biodiversity than men do," he said in an interview. "Men hunt and plant crops but it's the women who go into the forest to gather medicine, gather food, gather water." "It's the women who have a lot of the traditional knowledge of plants and biodiversity that indigenous communities rely on."

"In some places, women are already playing a role in efforts to protect nature - and reaping the benefits, the report said.

In Pakistan, an effort to plant a billion trees in Khyber Pakhtunkhwa province created jobs and was expected to have a positive impact on women, who are responsible for collecting forage, fuel-wood and water, the report noted. In the Pacific island nation of Samoa, a women-led mangrove restoration effort has boosted stocks of fish and crabs and provided better incomes, it added.

And in Cambodia, the government has created community fishing zones that allow local people - a third of them women - to manage their own fish stocks, the report noted.

Anne Larigauderie, executive secretary of the Intergovernmental Platform on Biodiversity and Ecosystem Services, said giving women, youth and indigenous people a bigger voice in decisions about using land and natural resources helps ""increase your chances of long-term success"".

### **Cambodian Navy mum over alleged Vietnam boat entries**

<https://www.khmertimeskh.com/50756469/navy-mum-over-alleged-vietnam-boat-entries/>

"The Ream Naval Base of the Royal Cambodian Navy yesterday neither refuted nor confirmed a report made by a Beijing-based think tank that over a hundred Vietnamese fishing vessels intruded into the Kingdom's maritime territory last month.

Admiral Khun Vuthy, spokesman for RCA, yesterday refused to comment and referred the question to Rear Admiral Mey Dina, spokesman for the Ream Naval Base in Preah Sihanouk province. Rear Adm Dina, who is also deputy commander of the naval base, said he was not aware about the Chinese think tank report. He said he also did not know about any cases of illegal Vietnamese fishing boats encroaching in the Kingdom' territory.

"We only know the number of Vietnamese fishing boats which are still fishing in the historical waters, he said, referring to a bilateral treaty on "historical waters first signed in 1982 by the then People's Republic of Kampuchea and Vietnam.

According to the treaty, a rectangular-shaped area outside Cambodia's eastern coast stretching approximately 120 kilometres out to sea with Vietnam's Tho Chu Island and Cambodia's Poulu Wai Island at its outer corners is jointly administered by the two nations.

Rear Adm Dina said between 90 to 100 Vietnamese fishing boats are found fishing in the "historical waters block when the navies of both nations conduct joint patrols there every three months.

Asked if the Ream Naval Base has any mechanisms to stop or crack down on illegal fishing from neighbouring countries, Rear Adm Dina said the base is not tasked with cracking down on illegal fishing at sea, but has the right to receive reports from other relevant institutions.

"As for the mechanisms of the naval base, we have a clear plan, but we cannot intervene in this task, he said. Eng Chea San, director of the Fisheries Administration, could not be reached for comment yesterday, but he previously told Khmer Times that some Vietnamese fishermen are fishing in Cambodia's maritime territories. "It's difficult to stop them [Vietnamese fishermen] because the maritime territories are big, he said. "The fishermen come to our sea and return to their territory. "We lack equipment to use during crackdowns, such as speed boats. Our boats are old, Chea San added.

The Beijing-based think tank, the South China Sea Strategic Situation Probing Initiative (SCSPI), which is affiliated with the Peking University's Institute of Ocean Research, recently published a report titled “Vietnamese Fishing Vessels' Illegal Activities Remained High in July. It claimed there was a high number of Vietnamese fishing vessels conducting illegal activities in the waters of China, Malaysia, Indonesia and Cambodia, reporting that in July, a total of 136,198 tracking points of 9,766 Vietnamese fishing vessels were recorded by the automated identification system (AIS). “In July, a total of 100 Vietnamese fishing boats intruded into the waters of Cambodia in the Gulf of Thailand, which was down by 30 percent from 157 in June, the report said.

The report also attached the supplied list of the vessel names, time, codes and even locations where the encroachments were made within the Kingdom's sea territory. The Chinese think tank also claimed some Vietnamese fishing vessels might come to China's waters for special missions rather than fishing. “As is pointed out in previous reports, Vietnamese fishing vessels were, for one thing, conducting illegal, unreported and unregulated (IUU) fishing, which is banned by international laws and certainly violates China's sovereignty and jurisdiction, the report noted.

In an interview with Khmer Times, Vietnamese ambassador to Cambodia Vu Quang Minh said he had no idea about the statistics mentioned in the report nor ever heard about SCSPI. “I have no idea how trustworthy their information is so I cannot have any comment on this article, he said.

However, Ambassador Vu said in general that the fishermen from Vietnam and Cambodia might unintentionally cross into each other's territory. “I think in general we are neighbours sharing not only land borders but also sea borders, he said. “It is understandable that fishermen from both countries from time to time might unintentionally, by mistake, go into each other sea territories. He said the two nations have not yet “officially solved the overlapping sea areas.

“The key points are that both sides have committed to making every effort to inform and educate each country's fishermen to respect international laws and the territories of each other and deal with the possible accidental, unintentional violation with humanitarian principles, in a peaceful and friendly way, as we, Cambodia and Vietnam, have always tried our best, Ambassador Vu said. “We should not allow any third party to divide us or provoke conflicts, hate or confrontation thus to harm our friendship and cooperation, he added. In its report, the SCSPI also questioned the Memorandum of Understanding between the US and Vietnam which was signed on July 22 in Hanoi to strengthen the fishery law enforcement capacity.

“The US is expected to help Vietnam fight against IUU [Illegal, unreported and unregulated fishing] fishing as well as support Vietnamese fishermen against illegal threats at sea, the report said. “The question is, the US has no law enforcement power in the South China Sea. Does Vietnam want to transfer its power? Or for other purposes? the report said.

According to a VietnamPlus report, the new MoU is expected to further promote cooperation between Vietnam and the US as well as the international law enforcement agencies to ensure the sustainable maintenance of marine resources and the fight against IUU fishing.

### **ASEAN lost a third of mangroves in last 40 years**

<https://www.thejakartapost.com/seasia/2020/07/29/asean-loses-a-third-of-mangroves-in-last-40-years.html>

"The ASEAN region lost about 33 per cent of its mangrove forests between 1980 and 2020, a decrease of more than 63,000sq km, said the ASEAN Centre for Biodiversity (ACB). Nations that comprise ASEAN have just around 43,000sq km of mangrove forests remaining. The ACB statement was released on Sunday and coincided with the International Day for the Conservation of the Mangrove Ecosystem. The intent is to remind the public of the importance of mangrove forests and the value of dealing with mangrove deforestation.

ASEAN accounts for 42 per cent of the world's total mangrove forests which provide critical breeding habitats for about 75 per cent of fish species caught in the oceans. Apart from supporting the world's food systems, mangroves are the planet's protectors against the catastrophic consequences of climate change.

They can store 10 times as much carbon as terrestrial ecosystems and specialized root systems make them natural buffer zones in coastal areas. Mangroves also minimize the impact of strong ocean waves and winds and help reduce erosion and siltation that impact coastal communities.

Fishery Administration director-general Eng Chea San could not be reached for comment on Sunday but he previously said that Cambodia has a total area of 58,800ha of mangrove forest. More than 1,000ha are in Kep, 1,966ha in Kampot, 9,352ha in Preah Sihanouk province and 46,529ha in Koh Kong province.

Senior marine biologist at Wild Earth Allies (WEA) Leng Phalla, said Cambodia's mangrove forests have been declining due to logging. But in recent years, government officials, civil society organisations and communities have worked together to replant mangrove forests, especially in Kampot province.

“Because of government promotion, people are now aware that mangrove forests are important for their descendants and their livelihood. They earn income from the mangrove forest by catching shrimp, crab and fish and can earn at least 30,000 to 40,000 riel (\$7 to \$10) per day, Phalla said. Kampot provincial Fisheries Administration official Sar Sorin said there are nine communities in the mangrove forest in Kampot province.



They have been given the right by the Ministry of Agriculture, Forestry and Fisheries to manage resources like the mangrove forest, seagrass and corals in their respective areas. Sorin said the mangrove forest is protected and conserved through the erection of poles, and the replanting of mangrove trees.

He said mangrove reforestation activities have been ongoing since 1995. From 2008 to 2020, nearly 400,000 mangrove trees have been planted in areas that do not yet have mangrove trees. "Various factors contribute to the decrease in the number of mangrove forests, including housing development and climate change, Sorin said.

### **Cambodian satellite city near Phnom Penh destroying wetlands with 1 million at risk of flooding, report finds**

<https://www.abc.net.au/news/2020-07-28/cambodia-satellite-city-sand-fill-lake-megamall-flooding-risk/12495180>

"A damning new report shows a multi-billion-dollar satellite city near Phnom Penh threatens to pave over vital wetlands and unleash untreated sewage into the Mekong River, putting more than 1 million people at risk of dangerous floods and water pollution. The project further threatens to upend the livelihoods of hundreds of people and contribute to unsustainable sand dredging, according to the report, Smoke on the Water, released on Monday by human rights and land rights groups Equitable Cambodia, Sahmakum Teang Tnaut, Licadho and the Cambodia Youth Network. The Beoung Tompoun and Cheung Ek wetlands, the report says, "are currently being destroyed by development groups building high-end condominiums, gated communities, and megamalls".

"Development is great for the rich people. But we are not rich. It's not great for us," one farmer from the wetlands told report authors in May this year. More than 1,000 families live on the wetlands or rely on them for farming and fishing in the area just south of the capital, not far from the Killing Fields.

ING City, the largest development in the South-East Asian country, is a project of ING Holdings, headed by Ing Bun Hoaw, a powerful tycoon with close connections to Prime Minister Hun Sen. It has been in development since 2004.

A conservative estimate of the amount of sand needed to fill in the wetlands is some 77 million cubic metres more than 30 Great Giza Pyramids full of sand. One community group highlighted in the report has already been impacted by the infilling of the lake with sand. Their village is subject to frequent flooding with dark black water, usually comprising sewage waste, which makes it difficult for children to go to school. "In the past, we had a beautiful environment. We

planted crops on the water, we could catch snails and fish, and it was so much cooler because of the breeze that came from the lake," one resident said in the report.

The report finds that 70 per cent of all rain and wastewater in Phnom Penh exits into the wetlands, "making it a critical part of Phnom Penh's flood mitigation system". "Should the wetlands be lost, wastewater will be unleashed upon fish populations and the communities that are dependent upon these rivers for water and food," the report reads."

"The destruction of the wetlands is continuing unabated, and this research suggests that devastating human rights abuses and environmental impacts may follow if the current trends continue." The wetlands are also described as a natural purifier for the city's sewage, and although there is a \$26 million man-made wastewater plant in the works through Japanese aid, it will treat less than 2 per cent of all wastewater entering the wetlands, the report said.

Eang Vuthy, executive director at Equitable Cambodia, described that as "clearly inadequate" to deal with the city's needs. "Just this week, we saw some communities near the lake have been seriously flooded," he said. "When the flooding happened and when the sewage system is not functioning well, the wastewater is coming up, and that really affects the health of the people, and especially the children. He called on the Government to be more transparent and to fix the social and environmental impacts of the project. Government spokesman Phay Siphon said he did not see the flooding or people being evicted from their homes, and told the ABC the report was "fabricated", without offering evidence."

"No, it's a lot better than it was a couple of years ago," he said, referring to flooding. Mr Siphon said the Government was building a canal to divert rainwater from the city to alleviate flooding and pointed to the wastewater plant. ING Holdings did not answer calls and did not respond to an emailed request for comment by publication time. Ing Bun Hoaw has previously said in a press statement about the project that: "Our vision for Phnom Penh blends shopping, working and leisure in a convenient and environmentally conscious way."

In 2007, the Government signed a deal which saw another lake in the city's north, Boeung Kak, filled in with sand to make way for condominiums. The forced evictions and human rights issues stemming from that development continue to reverberate today. "This is an ongoing problem of filling the natural lakes," Mr Vuthy said. The report opens with a remark from deeply-revered Cambodian architect, the late Vann Molyvann, who is credited with building some of Phnom Penh's once-enviable public works.

### **Fishermen without fish as Cambodia's river reversal runs late**

<https://wkzo.com/news/articles/2020/jul/21/fishermen-without-fish-as-cambodias-river-reversal-runs-late/1041577/?refer-section=world>

"Crucial water flows to the Tonle Sap, Southeast Asia's largest lake, have been delayed for a second consecutive year according to river experts, severely disrupting fishing and threatening the food supply of more than a million people. The river reversal vital for Tonle Sap Lake may not happen until next month, officials said, owing to drought conditions and more than a dozen hydropower dams in China and Laos which are blamed for disrupting the natural flow of the Mekong River.

The Mekong typically swells in rainy season where it converges with Cambodia's Tonle Sap River, causing an unusual reversed flow into the Tonle Sap Lake, filling it up and providing bountiful fish stocks. But that hasn't happened yet and people who depend on the lake are struggling to get by. "I went out fishing for two nights and couldn't catch enough," said 37-year-old Khon Kheak, repairing a fishing net under his stilt house at Kampong Khleang, a floating village with little water to float in.

That trip earned him 12,000 riels, or about \$3, compared to \$12-\$25 a day last year, enough to support his family of six. His wife Reth Thary worries those days may be over. "If it continues like this we would be finished, we also owe people money," she said, referring to a \$1,000 loan. Water typically flows into the Tonle Sap lake for 120 days, swelling it six-fold before running back into the Mekong as the monsoon season ends, usually in late September.

Based on rain forecasts and rainfall data, the river's unique reverse flow should happen in August, said Long Saravuth, a Deputy Secretary General of Cambodia's National Mekong Committee. The Mekong River Commission (MRC) attributes the delay to lower 2019 rainfall and operations of upstream Mekong hydropower dams, two of which are in Laos and 11 in China. "

"From now on, the reversed flow timing will likely not be the same as it used to be," the MRC said. Laos and China say the dams bring vital economic benefits and regulate water flow, helping to prevent severe floods and droughts. But fisherman San Savuth, 25, wants Cambodia's government to negotiate the release of water from those dams to help Kampong Khleang's 2,000 families.

Savuth may go to Siem Reap, a city 55km (34 miles) away, to find construction work. "We can't catch anything. There is no water, there is no fish," he said. Even without the coronavirus squeezing international travel, there is no hope of attracting local tourists for boat trips from Kampong Khleang, which would normally handle 600 passengers a day. There is a padlock on the abandoned tourism office surrounded by overgrown grass and about 130 tour boats are lying idle. "People in Kampong Khleang are fishermen without fish," said tour boat owner Ly Sam Ath. "There is no farming for them to do."

## **Chinese intentions towards the Mekong River and mainland South-East Asia**

<http://www.futuredirections.org.au/publication/chinese-intentions-towards-the-mekong-river-and-mainland-south-east-asia/>

"The Asian Development Bank estimated that South-East Asia will require \$3.1 trillion between 2016 and 2030 to develop energy, transportation, water and sanitation systems for sustainable development. Most of that investment is required in lower-income countries, such as Cambodia and Laos. That critical need for major infrastructure investment has created an opportunity for China to engage in "infrastructure diplomacy.

Beijing has almost fully exploited all of the hydropower potential in its portion of the Mekong River. It is lending support to downstream countries in South-East Asia to develop their own hydropower facilities. It has been proven that Chinese dams can have a dramatic effect on water levels in the lower Mekong basin

That could give Beijing additional leverage over the region. China is now in a position to build goodwill with the countries of the lower Mekong basin through infrastructure development or use its dams to coerce its near neighbours into accepting Chinese strategic interests. Both options are likely to be detrimental to the US and the broader Western world. The Mekong River provides water, energy and food to six countries in South-East Asia.

About 250 million people live in the lower Mekong basin and 80 per cent of them directly depend on the river for their food or livelihoods. The region has the most productive inland fishery in the world, which is valued at approximately US\$17 billion per year. The river is one of the most threatened in the world, however, largely due to the significant increase in the amount of water impounded behind large dams. Most of those dams are located within China, but there are plans for several more to be built in Laos and Cambodia.

Those dams will not only devastate the ecological balance of the region, but potentially grant China additional means to coerce countries within its growing sphere of influence. China has built 11 of the world's largest dams on its portion of the river, with plans to construct several more. Those dams store more than 47 billion cubic metres of water and can generate more than 21,000 megawatts of electricity.

Beijing has refused to join any international water sharing treaty, leaving those countries downstream with no option but to rely on Chinese "good will for the continued flow of water.

China's control over the flow of water in the Mekong is a physical manifestation of the considerable power imbalance between it and the smaller countries of mainland South-East Asia. China refuses to share hydrological data with downstream countries, choosing instead to keep it a state secret. Chinese water managers have reportedly maintained that 'Not one drop of China's water should be shared without China using it first or without making those downstream pay for it.' Relatively little of the water in the lower Mekong originates in China, however, suggesting

that even if Beijing were to withhold that water, there would be limited risk of deteriorating water security.

During the dry season and times of drought, however, when the lower Mekong basin depends on water from Chinese territory, China's contribution to the total river flow can rise above 40 per cent. It is during those desperate times that Beijing could apply additional pressure to the countries of mainland South-East Asia.

Some diplomats and government officials in the region have described the Mekong River as the next South China Sea. While there are some similarities between the two regions, there is a major difference. The South China Sea is largely a dispute over territorial waters and the right to grant or deny access to sea lanes. The Mekong River dispute is based solely on control over water resources without a territorial element. Water is unlikely to be diverted out of the Mekong River system, but it could be withheld by China to pressure countries to comply with Beijing's wishes.

Record low river levels throughout the lower Mekong countries in 2019 led to Thailand mobilising its military to respond to a drought emergency in the north-east, fishing communities on Cambodia's Tonle Sap Lake reporting an 80-90 per cent reduction in fish catches and a complete loss of access to fresh water in some highly populated parts of the delta in Vietnam. Thailand and Vietnam, which are both major suppliers to regional and global rice markets, recorded major declines in rice production.

China claims that the regional drought is due to a strong El Niño event that reduced rainfall across the region, including parts of south-west China, and maintains that its dams played no role in the lowering of water levels in the river.

It has long been assumed that Chinese dams would reduce water supplies in downstream countries, but until recently there was relatively little hard evidence. A recent scientific study, which utilises physical river gauge evidence from the Mekong River Commission and remote sensing processes, proves beyond all reasonable doubt that Chinese dams do significantly reduce water flow in downstream countries. It found that about 125 metres of river height is missing at a tidal gauge at Chiang Saen, near the Burmese and Lao borders, compared to the 28-year record. River height was considerably lowered after 2012, when several Chinese dams and reservoirs became operational.

The study also contradicts the official line given by Beijing in 2019. At that time, while the lower Mekong countries were suffering from one of the most severe droughts in recent history, Beijing claimed that it too was experiencing reduced rainfall. It is a fictional narrative that China continues to push, including in a recent article published in the Global Times. The data, however, indicates that the upper Mekong basin experienced above average levels of rainfall and snowmelt throughout the year.

The significant decline in river water levels in the lower portion of the basin was mostly caused by China impounding water in its dams, not a change in the region's climate. The study found that 'The amount of rainfall and snowmelt in China was enough to keep water levels in much of the Lower Mekong above average between April 2019 and March 2020 if China's dams were not restricting that water.' There is now ample evidence that Beijing could use water as a coercive instrument in mainland South-East Asia.

The dams in China's portion of the Mekong are rarely used for electricity production and there are other technologies, such as natural gas, solar and wind, that are rapidly becoming more economically attractive and efficient than hydropower. That suggests that water storage is the true rationale for the numerous dams constructed on the Mekong in China. That water could be impounded for use at a later date or in a different region of China. Alternatively, by denying the free flow of water downstream, it could also be used as an "unconventional asset" to pressure South-East Asian countries to comply with Chinese edicts. There is no evidence that China is currently transferring the water from the Mekong to other regions of the country (as the infrastructure required to do that would be impossible to keep secret) or using it to pressure foreign governments. As the Stimson Centre has explained, however, 'it's possibly just a matter of time before China begins to transfer water out of the Mekong and deliver [it] away from Southeast Asia to its eastern urban zones.' As Chinese dams are now impounding much more water than ever before, it is also possible that they could be used for coercive purposes.

Chinese dams also cause considerable damage and uncertainty downstream when large quantities of water is released unexpectedly. The completion of the Dachaoshan and Nuozhadu dams in 2002 and 2012-14 are linked to unexpected flood events downstream, which caused rapid rises in river levels and millions of dollars of economic loss. Strangely, an article in the Global Times concludes with an appeal for co-operation and strengthened co-ordination in the operation of dams on the Mekong. Stronger co-ordination between foreign dam operators has been a desire of the region for years, it is only China that has refused to share water data or even give advanced notice of large releases of water.

Countries in the lower reaches of the river have also built dams within their portion of the Mekong basin, with the majority becoming operational within the last five years. Over the last 30 years, Laos has built 64 hydropower dams on tributaries of the Mekong and Cambodia has built three. Another 438 dams are planned for the region, mainly in Laos and Cambodia. Beijing has plans to finance more dams in those countries, including on the mainstream of the river, which is part of its strategy to trap them in a web of debt.

International organisations warn that Laos in particular is at high risk of debt distress, mainly as a result of heavy borrowing from China. Its share of public debt is forecast to reach 70 per cent of GDP, which is high for a low-income country with relatively underdeveloped industry.

Similarly, some estimates suggest that about 40 per cent of Cambodian national debt is owed to China.

Laos accounts for 25 per cent of the Mekong's drainage basin, the largest share of any riparian. It has long sought to become the "battery of Asia" by exporting two-thirds of the energy that it plans to generate from hydropower. The Laotian Government has plans to build a series of nine dams on the mainstream of the river, but they have been delayed due to their economic and technical complexity. Beijing has signed agreements with Laos to build four of those dams. In 2012, construction began on the Xayaburi dam after finance was secured from a Thai company.

The dam became operational in 2019 and almost all of the hydroelectricity it produces is sold to Thailand. China welcomed the development of the dam, believing that it could weaken the special relationship between Laos and Vietnam and draw Vientiane closer to Beijing.

In the weeks following the inauguration of Xayaburi, water levels downstream declined to 1.5 metres in some places, the lowest level in a century. Thailand is likely to be adversely affected by any significant decline in water levels in the Mekong. By investing in the development of Laotian hydropower, however, it sought to internationalise its hydropower production and reduce its dependence on Burmese natural gas imports. As there is a strong anti-dam social movement in Thailand that prevents it from developing its own hydropower projects, and Laos has considerable hydropower potential, it saw Laos as a logical choice for investment. Thailand will need to continue to carefully judge the trade-offs between energy diversification and water security.

Chinese influence in Cambodia has grown significantly over the last 30 years, while the relationship with the United States has become increasingly precarious. As chair of the Association of Southeast Asian Nations in 2012, Cambodia failed to issue a joint communiqué for the first time in the organisation's history, due to a draft version containing strong criticism of Chinese activity in the South China Sea. Cambodia blocked the release of the 2016 communiqué for the same reason. In 2017, the Taiwanese flag was banned from being flown anywhere in Cambodia and the country was one of the first to release an official statement during the Hong Kong crisis in 2019, expressing unbreakable support for the "One China Policy".

China is the largest source of foreign investment and bilateral aid in Cambodia, in recent years it has donated almost four times as much as the US. Hydropower development on the Mekong River, however, is one area where there could be growing dissatisfaction between the two "iron-clad friends". Cambodia had plans to dam the Mekong, with Chinese assistance, at Stung Treng and Sambor. There are indications, however, that it is losing interest in those projects. In March 2020, it announced that it would postpone the construction of both dams until after 2030. It is unlikely that the decision will adversely affect the close Sino-Cambodian relationship, or even significantly reduce Cambodia's financial dependence on Beijing.

In 2015, China established the Lancang-Mekong Cooperation Framework (LMC) to compete with the Mekong River Commission, an international organisation set up in 1995 to co-operatively manage the lower portion of the Mekong River. Beijing uses the LMC to push its own development agenda in the region, which extends far beyond the development of hydropower on the Mekong.

The framework focusses on much wider issues than water security and is part of Xi Jinping's neighbour-centric foreign policy, which aims to foster a "community of common destiny" in South-East Asia. It uses the LMC to help realise its economic and political goals in the region and create a near neighbourhood that is more accommodating of Chinese strategic interests.

The United States is generally opposed to the construction of hydropower projects on the Mekong River, despite a US company unsuccessfully bidding to build the Xayaburi dam in 2007. In 2011, the US Congress passed the Mekong River Protection Act, instructing the

United States Executive Directors of the World Bank and the Asian Development Bank to oppose the provision of any loan or financial or technical assistance for the construction of hydroelectric dams or electricity transmission systems in the Mekong River Basin unless the Secretary [of the Treasury] submits a related report providing certain assurances.

That opposition is mainly designed to support Vietnam, which, as the lower riparian in the Mekong basin, will be most affected by the development of hydropower projects. Hanoi has become an important partner for Washington in mainland South-East Asia and is an integral part of the Trump administration's Free and Open Indo-Pacific strategy that aims to maintain a regional counterweight to Beijing.

The US also launched the Lower Mekong Initiative (LMI) in 2009 to counter rising Chinese influence in mainland South-East Asia. While the initiative has the technical and financial support of the European Union, New Zealand, South Korea, Japan and Australia, it has never matched the more strident approach adopted by Beijing. It also encourages the development of a more diversified and climate-friendly regional power sector that is less reliant on hydropower development.

It is pushing for closer hydrometeorological data sharing across the region to improve drought and flood forecasting, but it is not particularly well financed and has not been successful in countering China's muscular infrastructure development. The US is likely to find it increasingly difficult to compete with Beijing in the region, simply due to the enormous pressure that Laos and Cambodia are under due to the geographical proximity of China and Vietnam's inability to counter Chinese development projects.



China is now in a position to use its hydropower infrastructure as an unconventional asset across South-East Asia. That is not likely to be in the best interests of the US or the wider Western world.

### **COVID-19 opens a can of worms for fisherwomen in Cambodia**

<https://www.unenvironment.org/news-and-stories/story/covid-19-opens-can-worms-fisherwomen-cambodia>

"I'm used to hearing the sound of laughter every morning as my customers come to buy fish, says 37-year-old Huon Tim. "But it's very quiet these days in the village. For Huon, who runs a small fish and produce stall at the local market in Kampong Por, in Cambodia's Takeo province, these are desperate times. Cambodia boasts one of the world's most productive freshwater fisheries, with nearly 2 million people employed in the sector. Yet with the COVID-19 crisis, many small-scale family fishing operations are finding themselves in rough waters.

Before the pandemic, Huon's day began at the crack of dawn with a 120-kilometre round trip to source fish, fruit and vegetables from the neighbouring province. By the end of the day, Huon could expect to take home about 40,000 Riels (US\$10). This meagre income paired with her husband's was enough to run the household, send their two children to school and care for elderly parents. Now, although Cambodia has reported only 125 COVID-19 cases in all, restricted mobility has reduced the demand for fish products. Where demand exists, supply chains have been severely disrupted.

Huon's business has taken a significant hit. Procuring fish became harder and with people living in fear of exposure and choosing to stay away, Huon now only takes in about 20,000 riels (US\$5) a day, barely selling any fish. It is a challenge for Huon to dry and freeze her unsold fish. Ice and refrigeration don't come cheap and families like Huon's are in desperate need of electricity subsidies.

Meanwhile, a troubling water crisis looms over the community, caused by drought and exacerbated by climate change. Surplus water to store fish, irrigate fields or even for proper hand-washing, is a pipe dream.

Cost-effective renewable energy would be a lifeline for people like Huon, according to Parimita Mohanty, Programme Management Officer, Renewable Energy for UNEP Asia and the Pacific. "There is a massive opportunity to prioritize renewable energy innovations for essential services like water purification, cold storage, refrigeration for healthcare, and irrigation.

Building renewable energy into existing supply chains can help women like Huon recover in a climate-resilient way. A rapid assessment undertaken in May by UNEP and partners through the

EmPower project, showed difficulties like Huon's were found across Takeo and Pursat provinces. For those most dependent on natural resources and already affected by climate change in normal times, the pandemic and the lockdowns have meant much greater hardship. Female-headed households are often one crisis away from slipping below the poverty line. Channelling COVID-19 recovery funds strategically will be vital to support these families, says Mohanty.

“Currently, governments are setting up recovery funds. But easing conditions on collaterals and engaging more women-led SMEs in natural resource sectors will be important. It's also important that the Government of Cambodia gets the word out, according to Sorn Sunsopheak, Deputy Director of the Programme Division at the National Committee for Subnational Democratic Development.

“Many communities rely on government hand-outs but where there are financial incentives and schemes available for enterprises, women often don't know about them. We need to work together with the private sector, financial institutions and local civil society to make sure communities are aware, engaged and can come out of this crisis in a just and sustainable way.

Despite the challenges, the economic recovery from the pandemic has the potential to provide a more sustainable and prosperous life for people like Huon. Getting the recovery right is not just an opportunity to get back to normal, but to build back better.

### **COVID-19 leads to possible food crisis in Cambodia**

<https://www.khmertimeskh.com/50739118/covid-19-leads-to-possible-food-crisis-in-cambodia/>

"In Cambodia, where a large part of the economy is dependent on fisheries and agricultural food processing, COVID-19 has deeply impacted the industry resulting in reversing the developments related to SDG 8 of decent work and economic growth with respect to its farmer community, especially along the Mekong basin.

Cambodia's agriculture sector is responsible for generation of more than 20% of its GDP and employs around 30% of the population. Its position on the Global Food Security Index is below average at 90 out of 113 countries. Furthermore, UNDP estimates that around 70% of Cambodia's farms engage in subsistence agriculture by primarily taking loans and repaying them after the harvest season. There's a wide-spread poverty in the country, with the nation coming under the low per-capita income category.

After the Mekong River crisis, around 45,000 hectares of rice farms were damaged creating a debt crisis for poor farmers. Consumers on the other side of the spectrum have been hit hard by lack of food supplies, rise in prices of staple foods and a halt in income caused due to COVID-19.

The failure of last monsoons and the presence of Chinese dams in the Northern part of the basin have unleashed drought-like conditions leading to poverty and food insecurity. It has affected farmers growing rice on their fields as well as the fishermen, who reported a fall in fish volume by 60-70% due to the drought-like conditions in the Mekong Basin. Despite the government working towards ensuring a continuous operation of supply chains, food security is affected by lack of safety income-net for these Mekong delta inhabitants who are at the mercy of natural events and weather. In the long-term, this region will face a two-pronged attack on its food security. Firstly, the lockdown measures under the COVID pandemic having caused an unprecedented shortage of labour for agriculture coupled with the drought the region will be facing, there will be a slowdown in its supply-side activities.

This would affect income equalities and food supply-chains for the larger public in Cambodia, Lao, Vietnam, Myanmar and Thailand. Secondly, due to the pandemic, unemployment and price rises will result in income shortages. Prices of staple foods in areas like Siem Reap have been estimated to have shot up by 33.33% in Cambodia.

This will impact the demand due to inability of the buyers to pay for the food items like rice and fish. As countries strive to be more self-sufficient and reduce import-dependency by promoting local supply chains, the Mekong River Basin could be heading towards post-COVID-19 food insecurity. Furthermore, water shortage is also a reason behind slow progress in sanitation in rural areas, which could cause a major health-crisis.

In this scenario, adopting sustainable agricultural practices and latest irrigation techniques that reduce reliability on weather, especially when the globe is facing an acute climate change crisis, will be beneficial. If not tackled timely, the Mekong River Crisis coupled with the COVID-19 could see rollback of any progress made not only on SDG goals 1, 2 and 6 regarding no poverty, zero hunger and water sanitation, but also on SDG 13 and 14 regarding climate action and sustainable usage of water resources.

### **US gives \$56 mn to support Cambodias development, including in agriculture**

<https://www.khmertimeskh.com/50738964/us-gives-56-mln-to-support-kingdom/>

"The US government has provided a total of \$56 million to support Cambodia's social and economy development programme in 2020, including \$18 million to promote the Kingdom's agriculture sector, according to a joint statement.

The Cambodian government, through the Council for the Development of Cambodia (CDC) and the US government, through the US Agency for International Development (USAID), signed a development objective grant agreement last week to provide approximately \$18 million for

agriculture and environment programmes through implementing organisations in Cambodia and \$38 million for health and education programmes.

Chin Bun Sean, vice-chairman of the Council for Development of Cambodia, said that the agreement shows commitment by two countries on cooperation. “This continued bilateral development cooperation is an important pillar in promoting and strengthening the cooperation and partnership between the two countries, he said. In partnership with the Ministry of Agriculture, Forestry and Fisheries, USAID will fund programmes that reduce the number of people living in poverty, increase the production of important crops and improve nutrition among rural communities, according to the statement.

Patrick Murphy, the US ambassador to Cambodia, said during the signing that the US government is committed to continuing its support to the Cambodian people towards sustainable, inclusive and equitable socio-economic development.

Through collaboration with the Ministry of Health, programmes will aim to decrease maternal, infant and mortality rates in children aged under 5 years. The funds will also support programmes to decrease stunting and anaemia in children and women and reduce the prevalence of HIV/AIDS, tuberculosis and malaria in Cambodia.

In the education sector, the Ministry of Education, Youth and Sport and USAID programmes will support efforts to improve reading comprehension among children, lower school dropout rates and equip Cambodians to enter the workforce.

The funds will also support environmental programmes that reduce the vulnerability of people and landscapes to the effects of a changing climate and help Cambodia meet its international commitments to reduce greenhouse gas emissions, especially from deforestation and forest degradation, in collaboration with the Ministry of Environment.

The signed amendment to the agreement bring the total obligation of US development assistance in these sectors to more than \$253 million since March 2016, according to the statement. Since 1994, the US government has provided more than \$1 billion in support of the Cambodian people. In response to the global pandemic, the US government has provided \$11 million to support Cambodia's COVID-19 response since March 2020.

“These funds will be used to help mitigate both the immediate medical response to COVID-19 within the Cambodian health system and the second-order effects resulting from the pandemic, with a particular focus on ensuring inclusive and equitable economic recovery, the statement read.

## **FAO sees Mekong as biggest source of global inland fish catch**

<https://www.khmertimeskh.com/50733940/fao-sees-mekong-as-biggest-source-of-global-inland-fish-catch/>

"The Food and Agricultural Organisation (FAO) of the United Nations has ranked the Mekong Basin as the world's most important hydrologic region or river basin for freshwater fish catches. In its latest State of World Fisheries and Aquaculture report, the FAO said that Mekong Basin accounted for 15.2 percent of the global inland fish catch which was released in Rome recently saying 50 percent of the global catch came from the Mekong and six other basins.

The Mekong Basin spreads across Cambodia, China, Laos, Myanmar, Thailand and Vietnam. Some of the world's largest inland fisheries come from basins or river systems that are facing severe threats from anthropogenic and natural environmental pressures.

The report said global catches from inland waters have increased steadily year on year reaching more than 12 million tonnes in 2018 which is the highest level recorded. China accounted for the biggest share of catches from inland waters in 2018 followed by India, Bangladesh, Myanmar and Cambodia.

The FAO's twice-yearly Food Outlook said capture fisheries production was expected to fall 2.0 percent to about 90 million tonnes. Production from aquaculture is forecast to drop 1.4 percent to around 83 million tonnes.

### **Cambodian fishing villages fear job loss due to mangrove beach development plans**

<https://english.cambodiadaily.com/environment/cambodian-fishing-villages-fear-job-loss-due-to-mangrove-beach-development-plans-164083/>

Thousands of villagers in southern Cambodia's Kampot province are fearing loss of their fishing rights amid plans by a company linked to the ruling party to develop large stretches of a coastal mangrove forest for a port, satellite city, and golf course, residents said Thursday.

Local residents say they will resist plans by the Ching Kor Import Export Co. Ltd to fill in access to the mangroves and beach, on which they depend for their survival, Prek Tnout commune chief Ouk Sovannarith told RFA's Khmer Service.

"They are very worried and have protested to the authorities and company over the investment project in [our commune] in monthly meetings and whenever public information sessions are held," he said.

Though Cambodian Prime Minister Hun Sen has promised not to allow any private company to fill in the beach at Prek Tnout, villagers still fear loss of their jobs because company officials continue to pressure them to agree to company plans, he said.

Most residents of the community are poor and have taken out loans from banks to invest in their fishing business, he said, adding that they rely now on steady work to pay back their debts.

“Right now, the people here can make 50,000 to 100,000 to 200,000 riel [U.S. \$12.50, 25, to 50] per day by fishing,” he said.

Thousands of residents of three Prek Tnout commune villages—Prek Tnout, Chong Houn, and Trepeang Ropov—have depended on family fishing for their survival for many generations, local fisherman Mitt Chamrern said.

“I won’t know what to do if they fill in the beach,” he said. “Only young people will be able to work for the company [if development plans go ahead]. Old people won’t be able to do it,” he said.

“I can make some money now from fishing for my family to live on, but if they take away the beach, my fishing business will be lost,” he said.

Plans still under review

Company plans are still under study, though, Kampot provincial governor Chieu Tay said, adding that government authorities won’t do anything to harm the livelihood of commune residents.

“Nothing is official yet, so don’t worry so much,” he said. “The government will not do anything that affects the people. All of this is still under study, and we’ll know more for sure when the study is concluded.”

Calls seeking comment from the Ching Kor Import Export Co. Ltd—owned by Srey Keo Maly, a former senator of the ruling Cambodian People’s Party—rang unanswered this week on a line displayed on the company website.

Cambodian government spokesperson Phai Siphon meanwhile denied knowledge of the investment project when reached by phone for comment.

“Social and environmental impact assessments must be conducted in order to see what impacts a project will have,” said Ministry of Environment spokesperson Neth Pheaktra, speaking to RFA on May 12.

“Then, solutions will be offered to minimize the project’s social and environmental impacts,” he said.

“If the company fills up the beach, what can these people do, and where can they go, to earn a living?” asked Yun Phally, Kampot provincial coordinator for the Cambodian rights group Adhoc.

“If the beach is taken away by the company, their family finances will be ruined, and they won’t be able to repay their banks.”

Many already forced out

Hundreds of families in Kampot’s Chong Houn community have already lost their fishing areas to the Try Pheap Group Co. Ltd—owned by powerful Hun Sen ally Try Pheap—and have had to move to Prek Tnout themselves to find work, he said.

The Try Pheap Group, which began work on its own seaport in 2017, has already built a wall two kilometers long along the seashore to prevent villagers from entering the area, sources told RFA in earlier reports.

Land disputes are a bitter problem in Cambodia, where rural villagers and urban dwellers alike have been mired in conflicts that a U.N. special rapporteur for human rights in Cambodia has warned could threaten the country’s stability.

### **Mekong nations face growing threat to food security amid claims Chinas dams exacerbate effects of drought**

<https://www.scmp.com/news/china/article/3083523/mekong-nations-face-growing-threat-food-security-amid-claims-chinas-dams>

"Fishermen in northeast Thailand say they have seen catches in the Mekong River plunge, while some farmers in Vietnam and Cambodia are leaving for jobs in cities as harvests of rice and other crops shrink. The common thread driving these events is erratic water levels in Asia's third longest waterway. Water flows along the 4,300km (2,700 mile) Mekong shift naturally between monsoon and dry seasons, but non-governmental groups say the 11 hydroelectric dams on China's portion of the river – five of them starting operation since 2017 – have disrupted seasonal rhythms. This threatens food security for the more than 60 million people in the Lower Mekong that rely on the river for a livelihood, they say.

“Naturally, Mekong water rises and decreases slowly about three to four months from highest to lowest levels, said Teerapong Pomun, director of the Mekong Community Institute, an NGO focused on water resource management and based in Chiang Mai, Thailand. “[But now] the water levels fluctuate almost every two to three days all year, and every year, because of the dams.

Beijing has taken issue with assessments that accused Chinese dams of causing shifts in Mekong water levels, especially a United States think tank report on April 13 that said China was withholding water upstream, citing satellite data. China said the report failed to recognise that low rainfall caused a drought in 2019, the worst to hit the region in 50 years. Whatever the

argument, the food supply and livelihoods for tens of millions of people are at stake. The coronavirus pandemic is adding another twist to the troubling dynamic

“The situation in the Mekong is worrying as the prolonged drought poses dire threats to regional countries from various aspects, particularly in terms of food security, said Zhang Hongzhou, a research fellow with Singapore's S. Rajaratnam School of International Studies. “It will certainly adversely affect Beijing's relations with the Mekong region countries.

The Mekong River nourishes wetlands known as Asia's rice bowl thanks to the high nutrient loads the river disperses. Because so many people live off and from the river, disruptions to its water levels can be devastating.

“Farm crop yields decrease, animals die, which has a huge impact on the livelihood of people as their life depends on natural resources, said Bunleap Leang, the executive director of 3S Rivers Protection Network, an NGO that works to support dam-affected communities in northeastern Cambodia.

Mekong water levels fell to a record low in July last year, causing Vietnam, the world's third-largest rice exporter, to declare a state of emergency for the five provinces in the Mekong Delta that produce more than half the country's crop. Local authorities have warned the drought could run into May or longer.

In April, the US Department of Agriculture forecast that 2020 rice yields in Vietnam would fall by 3.3 per cent from the previous estimates because of the drought and subsequent saltwater intrusion, leaving the harvest 0.9 per cent lower for the year. Farmers are especially hard hit because when the water level falls, they have to buy more fuel for water pumps so their costs increase at the worst time, Pomun said. This is driving farmers from their rice fields to find other work, while Thai fishermen on the Mekong are pulling in empty nets, he said.

Besides the impact on agriculture, the Mekong and its tributaries make up the largest freshwater fishery in the world and catches are a mainstay of the diet for local people. Fish account for as much as 82 per cent of animal protein consumed locally, according to a report by the Mekong River Commission (MRC), an intergovernmental organisation representing Laos, Cambodia, Vietnam and Thailand.

The inland fisheries of the Mekong basin are a “lifeline for the people of the region, said the MRC on its website, which warns of “severe consequences from disruption to the catch, especially as the population of the Lower Mekong is estimated to rise to 100 million people by 2025 from the current 60 million.

## **China’s control of the Mekong through financing and construction of dams**



<https://thediplomat.com/2020/05/chinas-control-of-the-mekong/>

"A recently published report by Eyes on Earth, Inc. has pointed the finger at Chinese dams holding back water as having significantly contributed to the major drought impacting the Mekong River in Southeast Asia. The drought's effects have been felt by millions and hamper efforts to support development in the region. Whether it is done maliciously or out of lack of concern, controlling the flow of the Mekong is another way China exerts influence over its immediate region.

The report's findings, which have been contested by China, added further weight to the growing concern over Beijing's control of the vital waterway, which begins in China as the Lancang then flows through Laos, Myanmar, Thailand, Cambodia, and Vietnam, supporting over 60 million people. Water levels in the Lower Mekong were recorded at levels unseen in 50 years and have substantially impacted fishing and agricultural activity – which includes 20 percent of the world's freshwater fish catch. Vietnam, where the Mekong flows into the sea, has been particularly impacted.

The Mekong enables Vietnam to be the world's second largest coffee producer and third largest rice exporter. Vietnam accounts for an estimated 42 percent of the Mekong's irrigation equipped land and the river supports tens of millions of Vietnamese, including many subsistence farmers and disadvantaged poor. The report provides evidence to back up concerns that Chinese dams have held water from the Mekong to fill local reservoirs for long-term storage.

China has constructed 11 giant dams along the mountainous territory of the Upper Mekong to sustain its ever-increasing energy needs. The management of water flows has long been a concern for many living along the river. The situation is particularly exacerbated by fact that there are no water treaties or agreements that allow the sharing of data between China and Lower Mekong countries.

Dams further down the river, built and proposed, also pose a significant threat to the health and vitality of the Mekong. The proposed Chinese-backed Sambor Dam in Cambodia would potentially generate more power than is in fact used by Cambodia. However, its intended use would be for exporting a majority of its generation to Vietnam and Thailand.

Environmental impact reports revealed the dam would cause major disruption to migratory fish flows and the movement of nutrient-rich sediment into Vietnam. However, these warnings of an environmental disaster in the making appeared to have initially gone unheeded.

A result of lobbying from international NGOs and internal reporting, in March this year the Cambodian government decided on a decade-long dam moratorium on the mainstream of the river. While this places the Sambor Dam on hold, the government has not ruled out potential construction on tributaries. The Cambodian moratorium leaves Laos, which operationalized two

major dams in 2019, as the only Lower Mekong country pursuing hydropower on the mainstream of the river.

A landlocked country, Laos has strongly pursued hydropower both to meet local energy needs and also as an export product. Partnering with the Chinese government and entrepreneurs through the Belt and Road Initiative, the opaque Laotian Government has approved over 140 dams along the Mekong and its tributaries. Heavily indebted, Laos stands at a high risk of collapsing under the weight of its debt to China, leaving it dangerously susceptible influence from Beijing.

When visiting Thailand in 2019, United States Secretary of State Mike Pompeo singled out China's decision to limit the flow of water as the main reason for drought conditions plaguing the region. Alan Basit, president of Eyes on Earth, added weight to Pompeo's remarks by stating that “the data does not support China's position that its dams are not contributing to drought impacts.

China carefully controls and manages the data from its dams. However, the Eyes on Earth Inc. report has placed a spotlight on the Upper Mekong, showing that for half of 2019 China held back vast volumes of vital water from flowing down the river.

That significantly added to the impact of the drought on the millions of people who are supported by the Mekong. Whether through its own dams or the financing and construction of hydropower projects in other countries, China is largely in the driver's seat when it comes to the Mekong.

It has been previously noted that scientific reports have had little impact on regional policymakers, though in recent times some progress on dam moratoriums has been achieved. However, the increasing evidence of self-interest from China, coupled with the exacerbating effects of climate change and growing georegional tensions, may see impacted states begin to complain more loudly about the Mekong's mismanagement.

### **In the Mekong, a confluence of calamities**

<https://foreignpolicy.com/2020/04/28/in-the-mekong-a-confluence-of-calamities/>

"Over the past year, severe drought exacerbated by upstream hydropower dams has throttled agricultural productivity, devastated fisheries, and threatened the livelihoods of millions of people in the Mekong River Basin. The corona virus pandemic is compounding this situation, disrupting supply chains and increasing price volatility for rice and other staples. While Mekong governments have assured their populations of secure food supplies, concerns are growing around the affordability and accessibility of food for the region's most vulnerable populations. Nowhere are these risks of growing food insecurity more evident than in Cambodia.

For farmers and fishers throughout the Mekong River Basin, the corona virus couldn't have hit at a worse time. In April 2019, the region began suffering a prolonged and severe drought. An El Nino weather pattern led to widespread water shortages, as the monsoon rains which typically fall from May to October and usher in planting of the primary rice crop failed to appear.

Reservoirs across the region began to run dry, and the waters of the lower Mekong dropped to historic lows. Chinese dams on the upper Mekong worsened the drought's impact, restricting water from flowing downstream where it could have alleviated record dry conditions. Agricultural communities have suffered greatly.

By July, Thailand declared an emergency in 12 provinces and asked farmers to delay planting rice crops to avoid using what little water was left for vulnerable households. Reservoir levels remained low throughout the rainy season, and in early 2020, Bangkok deployed the military to implement drought disaster mitigation in 43 provinces. Preliminary estimates point to a sharp drop of between 40 percent and 54 percent for the country's off-season rice production.

Meanwhile in Laos, water levels on the Mekong River were recorded nearly 7 meters below normal in Vientiane. Because of the arid conditions, farmers were able to plant rice only on around 40 percent of the country's arable land, and the government estimated that production for the year would be 17,500 tons lower than in 2018.

Vietnam has faced similar challenges but fared better. With freshwater flows in the Mekong diminished, saline seawater pushed farther into the country's delta heartland, eventually damaging over 30,000 hectares of rice fields. The government moved quickly to work with farmers to shift rice-planting seasons and avoid risking the main crop, and as a result, the country's production is anticipated to drop by only around 3 percent in 2020.

Cambodia has been hit particularly hard by the drought. By December, some 45,000 hectares of rice paddy had been damaged, and 16 of the country's 25 provinces were facing freshwater shortages. The government recommended that farmers forgo a second rice crop to conserve water, and aid organizations began to share reports of farmers struggling under the debt burden of failed crops. As a still developing nation, Cambodia remains heavily reliant on agriculture to sustain livelihoods and provide food.

Subsistence farming is common the United Nations Development Program estimates that over 70 percent of Cambodian farms engage in some version of the practice and the agriculture sector employs more than 30 percent of the population, contributing more than one-fifth of the national GDP. The majority of farmed land is used for rice, and farmers regularly take out loans to cover the cost of supplies necessary for their harvest. For many, a poor or destroyed crop yield can mean financial ruin. At the same time that the region's agriculture has been starved of water, the country's fish catch has collapsed.

The Mekong River system is the world's largest freshwater fishery, typically producing more than 2.6 million tons of fish each year. A quarter of this comes from Cambodia and most of that from the Tonle Sap Lake. While heavy monsoons in 2018 led to a larger than usual catch, changes in flow from hydropower dams and climate change, as well as overfishing, have led to steeply declining catches in recent years.

### **Cambodia govt bans fish exports**

<https://www.phnompenhpost.com/business/govt-bans-fish-exports>

"The government of Cambodia has suspended fish exports in an effort to stabilise domestic supply in the face of the spreading coronavirus. In a Telegram message to leaders of the National Committee for Combating Covid-19, as well as government leaders and stakeholders on Saturday, Prime Minister Hun Sen decided to impose measures banning fish exports to avoid food shortages for locals and stabilise fish prices. "

To avoid rising fish prices, fish should be kept at home and banned from export to international markets. We previously announced a ban on only paddy and white rice but now we should ban fish exports because we can keep them and sell them at our markets, he said. The ban is the government's next move in maintaining ample food stocks. The ban on paddy and white rice exports went into effect on Sunday. Minister of Agriculture, Forestry and Fisheries Veng Sakhon told The Post on Sunday that the government's measures to increase domestic stockpiles are crucial to furthering Cambodia's food security.

This, he said, will prevent shortages and price increases as the Kingdom responds to the pandemic. "This is a wonderful measure because if Covid-19 spreads, we may suffer from food shortages. However, no specific date has been determined as the fish exports ban's effective date, he said, adding that the ministry is set to meet with the Ministry of Economy and Finance on Monday to address the issue. Meanwhile, he said his ministry is currently fortifying and expanding fish farming for local needs.

Every year, Cambodia exports a small amount of freshwater fisheries to neighbouring countries, while importing a substantial amount of seafood products to cater to restaurant demands he said. The Kingdom imported 130,000 tonnes of seafood last year.

The Ministry of Economy and Finance on Friday issued a decision on the "establishment of an ad hoc working group for supply management and strategic goods during Covid-19. The working group will comprise representatives of the ministries of Economy and Finance; Agriculture, Forestry and Fisheries; Health; Commerce; Industry, Science, Technology and Innovation, as well as the Council for the Development of Cambodia, the Green Trade Company, and the Agricultural and Rural Development Bank.

The working group will be given key tasks such as identifying the strategic commodities that best serve daily life; monitoring the status of their demand, supply and prices and ensure their viability and sustainability; and responding to a disruption to their supply chain.

Last year, the Kingdom exported 9,190 tonnes of fresh fish products, down 3.4 per cent from 2018's 8,880 tonnes, and 4,910 tonnes of processed fish products, down 1.8 per cent from 2018's 4,820 tonnes, said a Ministry of Agriculture, Forestry and Fisheries report. The Kingdom harvested 478,850 tonnes of freshwater fisheries last year and 122,250 tonnes of marine, it said. Aquaculture, fish and shrimp farming accounted for 307,408 tonnes of freshwater fisheries.

### **Cambodia halts hydropower construction on Mekong River until 2030**

<https://www.voanews.com/east-asia-pacific/cambodia-halts-hydropower-construction-mekong-river-until-2030>

"Experts in Cambodia have welcomed the government's recent halt on hydropower development on the Mekong River until 2030, but called on the government to focus on renewable energies. The spokesman for the Ministry of Mines and Energy's General Department, Victor Jona, told VOA on Tuesday that no further hydropower dams were needed on the Mekong River main stream for the next 10 years to meet energy demand. ""From 2020 to 2030, there will not be any developments of hydropower on the main river,"" he said.

The announcement effectively pauses the development of the two planned dams, Sambor and Stung Treng. Other tributaries, however, are excluded from this halt. For example, an 80 megawatt plant in Stung Pursat Province was still on the table, Victor Jona said. The government also did not exclude the possibility of further hydropower projects on the river after 2030. Environmentalists warn that hydropower dams have disastrous consequences for rivers' ecological systems. The Mekong River is one of the biggest rivers in the region and thousands of families depend on it for livelihoods.

The decision to pause the dams' development has given the government time to invest in other energy sources, experts said. ""This announcement is excellent news for people in Cambodia, Vietnam and the wider region,"" said Maureen Harris, Director of Programs at International Rivers. "

"The proposed Sambor and Stung Treng dams are predicted to have devastating impacts on Mekong fisheries and floodplains, and would likely deliver a death blow to the Mekong delta, which is already under immense pressure from the combined impacts of climate change and existing dams upstream in China and Laos."

"The electricity generated by existing dams, she added, had raised questions of whether hydropower dams were able to produce the energy they had promised. Brian Eyler, Southeast Asia program director at the Stimson Center, echoed the assessment. "

"The announcement is a clear signal that mainstream Mekong dams are becoming outdated and under-performing options for power generation," he told VOA via email. He said this sent a message to Laos and investors in the neighboring state "that Mekong mainstream dams make poor economic, environmental, and political sense."

"Most prominently, Laos is expected to begin construction of the Luang Prabang dam later this year. This, observers say, threatens the ecosystem of downstream Mekong. Eyler said that record low river levels over the last two years had caused electricity blackouts in the country for several months as there was not enough water to turn the turbines." "Clearly the risks to mainstream Mekong dams outweigh the benefits in the eyes of Cambodia's leaders," he said.

One of those risks, he said, was the threat it posed to the fish stock. "The two mainstream dams at Stung Treng and Sambor would have ... effectively killed the Mekong's fish population," he said.

Courtney Weatherby, a research analyst at the Stimson Center who focuses on energy, sustainability and water, said Cambodia had an estimated potential of 8,000 megawatts generated by solar energy, and 6,500 megawatts by wind turbines. Although the full potential was unlikely to be reached, she said solar projects could be built more quickly to address electricity shortages. "Solar energy in particular is a very viable option for Cambodia's future electricity generation," she said.

### **Women, rivers and water: a closely connected theme, as shown in the Mekong region**

<https://e.vnexpress.net/news/perspectives/women-rivers-and-water-a-closely-connected-theme-4069965.html>

"Women and girls represent over half of the Mekong region's population, and it is about time that their role received adequate attention. This March we commemorate International Women's Day (8th), the International Day of Actions for Rivers (14th) and World Water Day (WWD on 22nd). These annual events and the WWD theme this year "Nature and Climate Change" is a timely reminder of the inter-connection between water and climate change. The world has been experiencing the extreme impacts of climate change not least here in the Mekong region.

As a woman development practitioner, working with Oxfam on water governance in the Mekong, these March events are a timely reminder to me and us all of the inter-dependencies between women, rivers and water and pose the challenge whether enough attention is being paid to the inclusion and leadership of women and their game-changing role in water stewardship and

river protection? In January 2020, I attended a national consultation workshop on the proposed and contested mainstream Luang Prabang, hydropower, dam project on the lower Mekong River, in Laos.

Of the over thirty participants, there were three women formally invited: a senior woman government officer, a local NGO Director, and me. Five community women from downstream Northeastern provinces in Cambodia were additionally invited to the consultation by Oxfam and our partners.

On the one hand I am appreciative that the organizers thought to invite any women -this is a change in practice- but why were so few women included? Where were the women who ensure family livelihoods from the river, where were the indigenous women who understand the river ecosystem and conservation better than anyone else and where were the young women water professionals?

Sadly, this is not an unusual scenario for water resource practitioners. The field is perceived as highly technical and a predominantly male-dominated sector. When it comes to the governance of water resources, at whatever level (local, national, regional) we see the same under-representation of women.

This cannot be right in 2020. This is not a gender argument alone. The inclusion of relevant stakeholders must be the key principle for good governance. For Oxfam, water governance means who is and who is not at the decision-making table when resource allocation is being decided as these matters if there is to be equitable access to and control over resources that will have an impact for future generations.

Putting the Inclusion of stakeholders with legitimate interests in water resource development into practice requires political commitment, resource allocation, and changes in how business is conducted. Women, men, people with different ability, indigenous people, urban and rural youth across the Mekong region depend heavily and directly or indirectly on the river system and its resources. But we know from the evidence that their voices, knowledge and aspirations have yet to be adequately taken into consideration when decisions on large-scale water resources development are being made.

How can it be right to bear the cost and impact of development (positive or negative) if you have not had a say?

Regional water cooperation and governance require facilitated processes where stakeholders from upstream and downstream countries and communities have the legitimate space for dialogue and have their interests and concerns heard. Already this year, communities living

along the Mekong have felt the changes in the river and the impact on their lives and livelihoods when two major dams – the Xayaburi and Don Sahong-began operation.

Combined with the impacts of climate change, we witnessed the low level of flow, prolonged drought, the negative impact on agricultural production, drought in Northern Thailand and erosion in the Mekong Delta. Fishing communities in the Mekong and around the Great Lake have experienced decreased fish catches impacting on their livelihoods.

For the Mekong Delta in Vietnam alone, the unfolding drought and saltwater intrusion event is a particularly serious one, even more so than the ‘historical’ drought event in 2010-2016, with about 80,000 households experiencing water shortage, and tens of thousands of hectares of crops already damaged.

The Mekong region has been known for its ability to produce one of the largest fresh-water fisheries and to be the "rice bowl" of Southeast Asia. Water connects food production and its security and sustains the lives and livelihoods of millions. It appears that rapid, water resource development, with a focus on hydropower dams to meet energy needs, will be at the cost of the sustainable use of the rivers, their resources and the interrelation of nature, ecosystem and the people. If continued, we can expect greater inequality within the region and between countries.

The right to access to water as a basic human right is being challenged in this new decade.

All members of society have a right to participate in water resources development in their community, country and region. Women and girls represent over half of the population in this region and it is about time that women’s role as stewards of water in the community and the home and as guardians of the rivers received adequate attention. Inclusive participation of women in water governance is a non-negotiable condition to achieve the sustainable development goals; but more importantly, a commitment to rights and equality for rights holders.

This month and throughout this decade, Oxfam and our partners will be supporting them to take their place at the decision-making table.

### **Mekong River Committee releases report on livelihoods of fishing communities along the Mekong**

<https://www.khmertimeskh.com/50698419/mrc-story-on-livelihoods-of-fishing-communities-along-the-mekong>

"The Mekong River Committee (MRC) today released a report on safeguarding livelihoods for fishing communities in Mekong countries, including Cambodia. In this report, MRC has reviewed the community at Dun Ei, a fishing village 180 kilometres northwest of Phnom Penh,



where has been making a living through fishing along the Pursat River for generations. In recent years, however, river structures, such as dams and dikes, have been preventing fish from migrating upstream to their spawning and rearing grounds.

For most of the year, fish have become scarce along the Pursat River, forcing villagers to leave their homes in search of work. Those left behind face difficult livelihood and an uncertain future. To address the problem, the Cambodian Government partnered with the U.S. Department of Interior (USDOI), the Australian Centre for International Agricultural Research (ACIAR), and the Mekong River Commission (MRC) to install a fish passage.

A concrete ladder was constructed at Kbal Hong Dam in the Pursat River, a main tributary of Tonle Sap Lake, Southeast Asia's largest lake, to provide a route for more than 100 fish species to swim past the 4-metre-high barrier, reopening around 100 kilometres of the river. Horm Sovon, a 49-year-old fisher who is among hundreds of villagers to benefit from the project, said she could only catch fish three months per year.

Now she is catching less fish than before, but there are fish to catch every day. “I have a stable income now, and I am happy that other villagers both upstream and downstream are also able to catch fish, she underlined. The situation faced by the villagers at Dun Ei is typical of a wider problem affecting communities across the Mekong River Basin. In the Lower Mekong Basin, a total fish catch was estimated at 2.3 million tones (US\$ 11 billion). The sector supports the livelihoods of more than 60 million people.

However, the fisheries sector is threatened by tens of thousands of dams, dikes, weirs, and other water structures that have been built to store water for irrigation. According to the MRC, many of these structures make it difficult for fish to pass, affecting fish reproduction across the region.

Together with pressure from other water resources development projects, such as hydropower dams, increased populations, and exploitative fishing, the MRC Council Study estimated that the net present value (NPV) of the fisheries sector will decline by US\$16.5 million by 2020 and US\$22.6 million by 2040 in all the lower Mekong countries: Cambodia, Lao PDR, Thailand, and Viet Nam. The Kbal Hong ladder is considered one of the most effective fish passages in the Mekong region and stands as an example of effective regional collaboration.

“This successful case implies that the construction of fish passages in the basin and some of its tributaries is essential, Dr. An Pich Hatda, MRC Secretariat Chief Executive Officer, said.

“Improved fish production will enhance the resilience of the entire ecosystem, benefit local economies and sustained local community livelihoods.

Deputy Director of the Inland Fisheries Research and Development Institute, Tob Chann Aun, attributes its success to the technical support provided by the international partners, and also to the MRC guidelines, which enabled identification of the Kbal Hong Dam as a priority for fish

passage construction. “Kbal Hong fish passage is a unique demonstration site that can be replicated elsewhere in the country or in the region, Mr. Chann Aun said.

The Kbal Hong fish passage will serve as a model for 22 fish passages that have been prioritised by the Cambodian Government along the Pursat River. Other countries in the Mekong region are also benefiting from this joint effort. Ten barriers in Lao PDR, six in Thailand and three in Viet Nam have been identified for fish passage construction.

Installations of fish passage in Lao PDR have been completed while preparations for fish passage construction in Thailand are well underway. “I believe, through this partnership, we will be able to protect and restore river habitat, said Mr. Boonsong Sricharoenham, Senior Fisheries Ecology Expert of Thai Department of Fisheries.

### **How China’s reach across Asia is choking the Mekong River**

<https://www.thetelegraph.com/news/article/How-China-s-reach-across-Asia-is-choking-the-15017479.php>

"The former chief of Pak Chim, a tiny village on a tributary of the Mekong River, remembers clearly the moment he knew his hamlet would be no more. It was a decade ago. A few hundred residents of Pak Chim and nearby villages along the snaking Nam Ou River gathered. They were summoned by officials from the Laotian government and China's state-owned Sinohydro Corp. Dams were coming, they were told. Not just one, but a cascade of seven Chinese-built dams planned along the Nam Ou, once one of the Mekong's best tributaries for fishing and for farming in the rich sediment.

The villagers, the officials said, would all have to be relocated, pushed farther back from the river that has defined their lives. Officials sought to sway them with promises of new homes, electricity and roads. Impoverished Laotians would become rich. The landlocked country would fulfill its destiny of becoming the ""battery of Asia."" ""They told us that this was the sacrifice that had to be made for progress,"" said 55-year-old Nok, the former village chief, providing only his nickname for fear of reprisal over perceived criticism of his government. ""Even then, we were not sure about their promises."

"The reality that has unfolded over the past 10 years, however, has been more dire than residents could have imagined. The Mekong River and its biodiversity-rich tributaries - the lifeline for more than 60 million people in Southeast Asia - dropped to their lowest levels in a century last summer. A section of the river has changed from muddy brown to sky blue. Experts say this is a sign of the river's compromised health, the result of a dramatic drop in sediment. Fish supplies are scarce. Rice cannot be planted on dried-up banks starved of nutrients. Entire ecosystems are being forever changed.

The region is at "a tipping point," said Brian Eyler, director of the Southeast Asia program at the Stimson Center and author of a book on the Mekong. If the dam-building continues unchecked, the Mekong basin is on a path toward "ecological peril," accelerated by climate change. The last days of the river, he added, could be "here and now."

"The dams on the Nam Ou and others across the Mekong basin are part of what China calls its Belt and Road Initiative, a vast network of projects that seeks to cement Beijing's influence across Asia and beyond. Each development - dams, ports and railways, among others - gives China another long-term foothold in a nation's economy and trade. A journey down the Nam Ou by The Washington Post traced the hardships and broken promises for the Mekong river system as more dams go up - about half of them built by Chinese companies.

In Laos, 60 dams dot the Mekong and its tributaries. Under construction: 63 more, despite a major dam collapse last year that claimed dozens of lives. The dam projects along the Nam Ou cover more than 80 percent of its length. There are more than 370 dams planned along the Mekong's 2,700-mile course from China through the heart of Southeast Asia, linking Laos, Vietnam, Thailand, Cambodia and Myanmar.

Waterways such as the Nam Ou are viewed by the Chinese as "not a river, but a laboratory," said Pianporn Deetes, an environmental activist with International Rivers who has made several trips to the Nam Ou to chronicle the impact of dam-building. "They want to own the whole thing," she said, "to just play with it." The town of Muang Khua once survived on the backpackers who arrived overland from Vietnam, eager to travel along the Nam Ou to Luang Prabang, one of the world's most scenic river journeys.

But the wooden longboats now sit empty. Next to the departure point are instructions for tourists in English on how to get around the dams that block their path. What most worries the villagers are the red markings that brand their homes. The lines are estimates of where the water level will rise when the Nam Ou 4 dam upstream is operational in October.

Earlier this year, representatives from Sinohydro arrived with a clear message: Leave or you will be flooded out. But the Sinohydro envoys never came back, and the villagers are unsure what to do. "There are so many rumors," said one boatman, who, like many interviewed, spoke on the condition of anonymity for fear of government retribution. "We have no idea if we can stay here or if we have to leave." For now, river-based communities along this stretch of the Nam Ou are trying to live life as they did before: panning for specks of gold during the low tide and luring fish by cutting a type of grass that attracts them.

As they await the finished dam, they also worry about the unpredictability of the water levels, which have been fluctuating wildly. The sounds that define stretches of the river without dams - roosters crowing, the faint hum of engines fitted on the backs of villagers' longboats - fade around the Nam Ou 2 dam, the first phase of the project to go online. This river was a key

navigation path between the mountainous provinces in northern Laos, but the dams have made travel by boat cumbersome.

Now, this stretch of the Nam Ou below the dam has effectively been abandoned. Some 2,300 households have been forced to relocate from the river and can no longer depend on it for daily life. The dams have cut off the natural downstream flow of the river and blocked the flow of sediment from the towering karst formations.

We encounter one man fishing who said he had traveled from Luang Prabang, an ancient city on the Mekong to the south, because the fish around the dam are abundant. But that, too, is unnatural. The fish are trapped between two dams and don't swim as far or as fast as they used to, making them easy prey. Some villagers have tried to continue farming along the river but say the uneven water levels make it harder for them and their livestock.

### **‘No fish: How dams and climate change are choking Asia’s great lake**

<https://www.latimes.com/world-nation/story/2020-01-20/how-climate-change-and-dams-threaten-one-of-the-worlds-great-lakes>

"For more than half a century, January meant prime fishing season for Pang Bin. He took his wooden boat out into Cambodia's largest lake, his catches and their sales sustaining his family for much of the year. This month, the 75-year-old decided to call it quits, but not because of age or any health concerns. "No fish, he shrugged. "Just very, very poor. I've never seen a year like this. Across the Tonle Sap, a vast shallow lake in the heart of this Southeast Asian nation, fishermen are experiencing the least productive season in memory.

Years of dam-building and droughts intensified by climate change have upset one of the world's richest freshwater fisheries, carrying potentially severe consequences for millions who rely on the lake for survival.

Fishermen say they are capturing only 10% to 20% of their usual haul, and that the catches are smaller than in past years. Upstream, the waterways that feed the lake recently turned from their familiar caramel hue rich with nutrients that sustain hundreds of species to an unsettlingly clear aquamarine due to what experts called "extremely low flows.

Normally, at the start of the year, the banks of the lake are piled high with thousands of tons of silvery, finger-length mud carp, which are mixed with salt to make prahok, a pungent, fermented paste that is an important source of protein in the Cambodian diet. By some estimates, three-quarters of the protein that Cambodia's 16 million people eat comes from the lake.

But the catches were drying up by mid-January, weeks earlier than usual. The price of prahok in nearby markets has doubled to about \$3 per pound. That is a substantial increase in a country

where the average household has about \$200 a month to spend on food, according to official statistics, leaving some families to fret about how they will afford a staple traditionally found in every Cambodian kitchen.

“It's unlikely that there's a protein replacement available for people, or that they have the cash to buy that protein, said Brian Eyler, Southeast Asia program director at the Stimson Center in Washington. “That will have all sorts of knock-on effects and will translate into various human development challenges.

The struggles of the Tonle Sap lake, or “great lake, reflect a broader crisis in the Mekong River system, the lifeline of Southeast Asia. The Mekong, which feeds the lake via a tributary called the Tonle Sap river, courses 2,700 miles from China's Tibetan plateau down through Myanmar, Laos, Thailand, Cambodia and Vietnam, where it waters a vast, rice-growing delta before emptying into the South China Sea. The Mekong basin produces 2.6 million tons of freshwater fish annually and supplies food and livelihoods for an estimated 60 million people.

Last summer, a drought whipped up by warmer Pacific Ocean currents — the phenomenon known as El Niño — delayed and shortened the annual monsoon rains that nourish the river system. It was the second severe El Niño event since 2016, bolstering scientists’ warnings that climate change is making these storms stronger and more frequent.

In July, two months into what is typically the wet season, the depth of the Mekong fell to the lowest levels ever recorded, according to the Mekong River Commission, an intergovernmental agency that advocates for responsible management of the river’s resources.

In northern Thailand, the remains of a Buddhist temple that had been submerged for decades after a dam was built reappeared on the sandy riverbed. Rice farmers across the region planted a fraction of their standard crop, finding little water to irrigate their fields.

But the dwindling current wasn’t just a result of weather. July was also the month that engineers in China and Laos carried out tests on two giant hydroelectric dams that sharply reduced the river’s flow for several weeks.

Those operations focused attention on the spate of dams being erected along the Mekong and its tributaries as riparian countries seek to harness the river’s might to drive economic development.

Over the last three decades, 13 dams have been built along the Mekong’s mainstream, 11 in the rocky headwaters of China’s Yunnan province. Twelve more are under construction, along with dozens of smaller dams downstream along tributaries in Laos, a poor, landlocked nation whose communist rulers are attempting to sell energy to neighboring countries. Many of the Laotian dams are being financed by Chinese loans.

“We really don’t know the effects of all these dams and the ripple effect they will have on such an integrated river system,” said Taber Hand, founder of Wetlands Work, a nonprofit environmental group in Cambodia.

Environmental analysts say that as the dams store and release water to produce energy — and as riverbed sand is dredged for construction — they reduce the flow of fish and nutrients, upsetting a delicate hydrology that is supercharged by the annual monsoon cycle.

As the storms typically begin in late May, water from the lake flows into the Tonle Sap river and south into the Mekong. The volume of rain soon becomes so great that the Mekong fills up and — unique among the world’s rivers — changes course.

Water gushes north back into the lake, along with fish, larvae, organic matter and sediment that produce an explosion of life: an annual fish catch of roughly 500,000 tons, greater than the yield of all the rivers and lakes in North America.

Because of the backflow, the lake rises by as much as 26 feet until the fall, when it starts to drain again, an event that Cambodians mark with a three-day festival of boat races and fireworks. The ecological term for such a cycle is a flood pulse, leading some to label the Tonle Sap the heartbeat of the Mekong region.

“You just have this unbelievable bouillabaisse of production,” Hand said. “It’s the most productive freshwater lake in the world. But when you screw up the flood pulse, you screw up a very, very complicated, dynamic system.”

In good years, the floodwaters stick around for four to five months. Last year, they receded after just six weeks.

In Phat Sanday, a village of blue-painted wooden houseboats at the southern edge of the lake, the local government administrator records the high-water mark every year on the concrete stilts that his office sits on, two stories above the lakebed. The 2019 mark was 10 feet below normal.

“In my lifetime I’ve seen the water reduce more and more, but in the last 10 years it has become worse,” said Heng Mono, the 65-year-old administrator.

“We used to see a lot more water at this time of year. Now it’s a lot more land. We have to work twice as long to catch the same amount of fish.”

On the porch of her houseboat in Phat Sanday, Heab Nom recalled her childhood on the lake, when she could drop a net in the water and pull up an armload of mud carp, known as *trey riel*.

But this month her family caught so little that she and her seven siblings had to buy *trey riel* from other fishermen to make *prahok* to sell. The family’s income for the winter fishing season, which could touch \$1,000 a month in a good year, would drop by one-third, she estimated.

“Fish is very important in our cooking, and it’s our main source of income because we have no land,” the 38-year-old said, leaning over a wood block and chopping the heads off a small mound of carp.

“We used to keep some of our catches to cook at home, but this year we will just eat less fish.”

Cambodian officials are sensitive to the lake’s well-being — Prime Minister Hun Sen banned commercial fishing in the Tonle Sap in 2012 to protect fish stocks — but say they have been powerless to stop dam building by other countries. They are careful not to criticize China, the country’s main trading partner and a powerful supporter of the autocratic Hun Sen, who has held power for 35 years.

“A country like us, we are at the bottom of the food chain,” said Mey Kalyan, a senior advisor to the Cambodian government’s Supreme National Economic Council. “Countries are going to act in their economic self-interest. That is the world now — like it or not.”

To surmount its own severe power shortages, Cambodia, too, is turning to hydropower — it has proposed building a 2,600-megawatt dam that would be the largest on the lower Mekong. One environmental watchdog warned that it “would create a complete barrier to migratory fish” and could be “the most destructive dam in the Mekong River basin.”

On the lake, families are beginning to glimpse a future with far less fish.

At floating health clinics along the southern shore, medical staff said they were seeing more cases of diabetes and hypertension, which some doctors blame on people consuming less fish and more processed foods.

Phat Phalla, an activist with the Fisheries Action Coalition Team, a coalition of Cambodian nongovernmental agencies, sketched a grim outlook: more fishermen migrating abroad for jobs, more mothers and grandmothers raising children, more children dropping out of school to earn money. Her seven adult children have all left to find work far from their village of Chhnok Tru, while she remains at home to care for her seven grandchildren.

“I’m concerned,” the 58-year-old said. “We will face more malnutrition and illness. We won’t even be able to rely on our traditional food. If it goes on like this, there may come a point where Cambodians won’t be able to make prahok anymore.”

## **Ministries seeking to eliminate illegal fishing in Cambodian sea**

<https://www.phnompenhpost.com/national/ministries-seeking-eliminate-illegal-fishing-cambodian-sea>

"Cambodia's Ministry of Interior secretary of state Lam Chea said on Monday that specialists from the ministries of Interior; and Agriculture, Forestry and Fisheries, along with authorities in coastal provinces, had discussed to amend the National Plan of Action for the prevention and elimination of illegal fishing in the Cambodian sea.

The discussion was held during a meeting between the ministries on January 16. Representatives from four coastal provinces and relevant ministry specialists had provided insights to the National Plan of Action to ensure that fishing crimes in Cambodian waters are stopped immediately.

“Sometimes, the authorities find it difficult to monitor the sea and manage fishing activities day and night. We hope the relevant authorities and individuals will cooperate and stop illegal fishing activities not just in national but also international waters.

“Spurred by the revision of the National Plan of Action, the Ministry of Agriculture, Forestry and Fisheries plans to amend the Fisheries Law. It can prepare a draft sub-decree to strengthen all capacities for the crackdown of all illegal and unregulated fishing.

“Although these operations don't have a 100 per cent success rate, they still prove to be rather effective, Chea said. In a Facebook post on January 16, the Ministry of Interior said the National Plan of Action was in the works. With it comes the revision of the legal provisions, training of inspection officials in fishing ports, and the mandate to record and observe the system of monitoring ships and fishing boats in Cambodian waters.

“The National Plan of Action for the prevention and elimination of illegal, unregulated and unauthorised fishing is based on the international and regional plans of action and the guidelines of the Asean Development Secretariat in preventing the import of fishery production from illegal fishing, the post said. It noted that the National Plan of Action aims to enforce comprehensive, effective and transparent measures for the successful implementation of regulations of the fisheries management programme.

Minister of Agriculture, Forestry and Fisheries Veng Sakhon declined to comment. Ministry spokesman Srey Vuthy could not be reached for comment on Monday. Both Kampot deputy provincial governor Pel Kosal, who was at the meeting, and Deputy Navy Commander Tea Sokha also declined to comment.

## **Mekong communities struggle as China tests dam equipment**



<https://www.aljazeera.com/news/2020/01/mekong-communities-struggle-china-tests-dam-equipment-200110053233331.html>

"Water levels on the Mekong River, which flows through China and five other countries before emptying into the South China Sea, have dropped once again after Beijing revealed it was testing equipment at one of its 11 dams in the upper reaches of the vital waterway. The Mekong River Commission (MRC), an inter-governmental body made up of representatives from Laos, Cambodia, Thailand, and Vietnam, said on December 31 that China would be testing its equipment, warning of a potential 50 percent drop in water outflows.

According to the MRC's forecast, water levels could fall by as much as 70 centimetres in Thailand between January 6 and January 10, and up to 25 centimetres in Cambodia between January 12 and 14. In Thailand, the lack of water has had severe consequences, said Pianporn Deetes, Thailand campaign coordinator for international rivers."

"In Chiang Khong, northern Thailand bordering Laos during the first week of this year, locals witnessed sudden water fluctuation; water in the Mekong increased then sharply dropped within a couple of days,"" she told Al Jazeera in an email. ""I was there [on Tuesday] and found that some local farmers lost their crops due to non-seasonal water fluctuation." "Not only crops were affected, she said." "Riverbank erosion is also severe.

The water fluctuation also affected migratory fish that depend on the seasonal flood-drought circle of the river. Less fish, less or no income for fisherfolks. They told me this kind of damage has been 'more of the same'."

"The Mekong is the world's 12th-longest river, stretching 4,350 kilometres (2,703 miles) from China in the north to Vietnam in the south. Despite the worrying fluctuations and its impact on the river, experts said they were encouraged that China - for the first time - made its plan known beforehand, extending the hope of better coordination over the Mekong with countries downstream.

Brian Eyler, director of Stimson Center's Southeast Asia programme, said while it remained unclear what kind of equipment testing was conducted, the notification suggested that dam operators were probably turning off turbines when testing their equipment, which led to the sudden drop in water levels downstream.

The water level in the Golden Triangle, where Thailand, Laos and Myanmar meet, had been reduced by approximately 40 percent from three metres to less than one, he said.

While the river would probably return to higher levels with the end of the testing, such fluctuations were a problem.

“For a river to be healthy it needs regular flow and not to be shocked with unnatural ups and downs,” Eyler said.

Such sudden drops and rises, he said, confused the natural fish movement in the river, leading to a drop in fish stock.

“This, in turn, results in depleted fish stocks for fishers in the Golden Triangle which traditionally thrives on fishing for their livelihood,” he told Al Jazeera in an email.

“Erratic operations at the Jinghong Dam have also caused sudden rises in the water level over the years and this has major implications for the Mekong’s ecological processes,” he said.

#### Agricultural impact

The Jinghong Dam began operations in 2008 and is one of the biggest in China, located in southern Yunnan province on the upper reaches of the Mekong.

With the dam in operation, the ecosystem of the river has also been affected, with river grass not growing during the dry season if water is released from the dam because it prevents sunlight from reaching the riverbed, Eyler added.

Agriculture has also suffered.

“When the Jinghong Dam suddenly releases water during the dry season, locals who conduct riverside agriculture see their gardens flooded and eliminated,” Eyler said.

“If they stored equipment along the river bank or grazed livestock there, these are often swept away due to the sudden releases. Millions of dollars of damage are incurred and this hits poor rural farmers in ways that are hard for us city folk to understand.”

Ian Baird, a University of Wisconsin researcher who studies the Mekong, echoed similar sentiments. He explained that even the short-term holding of water could have long-term consequences if the water level got too low. For example, the sun can heat low-level water to a point where some species find it difficult to survive, Baird said.

The situation was difficult to assess without more information, which had been a problem for years with China traditionally disclosing little information about its hydropower energy policy, Baird said.

#### China notification

Previous testing of dam equipment had led to flash floods and drops in water levels without China informing the public in advance.

The fact that China announced it would be testing equipment this time, he said, could indicate a shift in relations between China and MRC-countries.

“I think this is an interesting case because of the fact that China has publicly announced that this is going to happen, and this is rather unusual,” he said. “I’m not sure if this is a result of the MRC-China dialogue. This sort of thing has been going on for many years, and typically China doesn’t announce it.”

At the end of last year, the MRC and Chinese Lancang-Mekong Water Resources Cooperation Center signed a memorandum of understanding for increased cooperation.

Another scenario, Baird said, could explain the warning: this year’s drought. Given water levels had already declined, the consequences of not warning downstream countries could have been even greater.

“So I’m not sure if it’s because the impacts are going to be especially serious this year, or is it because they’re just being more open about what they’re doing?” he said.

A third reason, Baird said, could be that the traffic of bigger cargo ships had increased and China did not want to leave them stranded in the middle of the river between China and northern Thailand if water levels dropped.

The Chinese embassy did not respond to requests for comment and multiple departments in the Chinese Ministry of Water Resources could not be reached.

The MRC Secretariat said in a statement to Al Jazeera that the announcement came because of enhanced cooperation between China and the MRC.

“The cooperation between the MRC and China has changed for the better in recent years,” the statement read. “We have deepened our technical and political cooperation through many ways.” The MRC cited joint studies and regular meetings among other forms of cooperation.

“With many hydropower projects now on the main stream (of the Mekong), the dams will require a proper coordination of cascade operation. In this case, an early warning or information sharing mechanism is now becoming more and more important than ever. And the public can expect regular flows of information around this in the future.”

But Eyler said that – despite it being a step in the right direction – the warning had not been issued early enough for communities to prepare properly for water shortages.

And Pianporn said simply releasing information was not enough.

“Thai authority and MRC might have announced what they received from China, but a critical question is: Are we accepting this as a new normal for the Mekong, its ecosystems, and its dwellers in the entire basin?” she asked.

“An announcement and warning is not enough. We need accountability and better management for the Mekong River.”