

Focus

Asia-Pacific



Newsletter of the Asia-Pacific Human Rights Information Center (HURIGHTS OSAKA)

September 2025 Vol. 121

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Editorial

Right to Food

Those who depend on land or water resources for their food run the risk of being deprived of access to such resources.

Those who forage the forest for food, or till the land to grow food, or go to catch fish in the sea are vulnerable to getting hungry.

Once considered encroachers, people living in a forest are effectively made to suffer hunger.

The Karen community in Thailand who live in the forest that has been declared a protected area by the Thai government and subsequently listed by UNESCO as Natural World Heritage Site had to be displaced for the sake of protecting the site as a valued natural resource.

Forced resettlement outside of the forest made the Karen community unable to grow their own food due to lack of fertile land to till, and forced them to seek work in the city.

In the case of Pacific island states, the issue is about the vulnerability of coastal communities that suffer from inadequate income from traditional activities in fishery areas affected by climate change. With low fish catch, people in coastal communities suffer from rising cost of food and high global fuel prices.

While the Pacific ocean supplies a significant amount of fish to the global market, fishery resources accessible to coastal communities suffer.

Forced Eviction, Enforced Disappearance and Health Issues in Kaengkachan UNESCO Natural World Heritage Site

Pornpen Khongkachonkiet

On 7 August 2025, the Act on the Protection and Promotion of the Way of Life of Ethnic Groups was passed in the House of Representatives. This is the first law in Thailand that guarantees the ethnic way of life. It is about healing the past violations that might have impacted the ethnic minority in Thailand since the establishment of the Thai nation-state.¹

A report of the Sirindhorn Anthropology Centre states that Thailand has over sixty ethnic groups with about six million people, or about 10 percent of the total population. And among these ethnic groups, the Karen, the Mani, the Mlabri and the Moken have suffered from racial discrimination, subjected to forced evictions and deprived of basic rights despite being Thai citizens.²

Past Violations: From Forced Eviction to Enforced Disappearance

The Karen-Bangkoi-Jai Paen Din have lived in the highlands and deep in the forest close to the Thai-Myanmar border for decades. This area includes the Kaengkachan National Park. The most senior community member, Ko-I Meemi, aka Grandpa Ko-I, was born in this area in 1911 according to his Thai national identification

card. He died in 2018 at the age of 107. The area was declared a forest reserve in 1965, and was incorporated into Kaeng Krachan National Park in 1981. In 1996, the government systematically forced them to resettle in the lowlands claiming that their sustainable cultivation of the forest was an encroachment on forest area.

During the 2000 to 2011 period, three helicopter crashes occurred on military transport and recovery missions, resulting in more than twenty fatalities. The news about these consecutive tragedies marked one of the most significant military losses in Thailand and deeply affected the public. And because of these accidents, the public learned to know of the existence of Karen-Bangkoi-Jai Paen Din community of Bangkoi.

Thailand proposed in 2015 the listing of the Kaeng Krachan Forest Complex (KKFC) as a UNESCO Natural World Heritage Site. The UNESCO decision on the proposal was postponed four times due to the poor participation of the local community in the process. However, the World Heritage Committee of UNESCO during its 44th session in 2021 declared KKFC as a natural world heritage site. Both the Thai authorities and UNESCO

failed to organize any meaningful consultation with the Karen community on the matter. Consequently, the rights of the Karen community to land and livelihood, and culture and tradition were not recognized.

This is borne by the continuing denial of the existence of indigenous peoples despite Thailand being signatory to the United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP) and having acceded to the International Convention on the Elimination of All Forms of Racial Discrimination in 2003.³

Thailand's stance is shaped by its history of avoiding formal western colonization. Issues arise from internal colonialism, where the state and ethnic Thai elite construct a socio-political order that marginalizes and delegitimizes indigenous identities, treating them as "alien" or "uncivilized."

The denial and marginalization are reinforced through powerful stereotypes portraying indigenous groups as insurgents, drug traffickers, or forest destroyers. These labels are more than insults; they heighten state security concerns and rationalize repressive measures. Consequently, indigenous peoples in Thailand have faced systemic human rights violations,

including forced evictions, extrajudicial killings, torture, and enforced disappearances, all justified under the guise of maintaining national security.

Despite the Cabinet Resolutions on June and August 2010 on reviving the way of life of two protected populations, the Karens and the local fisherfolk (Manis), the Karens have been losing their houses and land, some were arrested and convicted of crimes, and some others were declared forcibly disappeared persons, as was the case of Porlajee Rakjongcharoen or Billy.

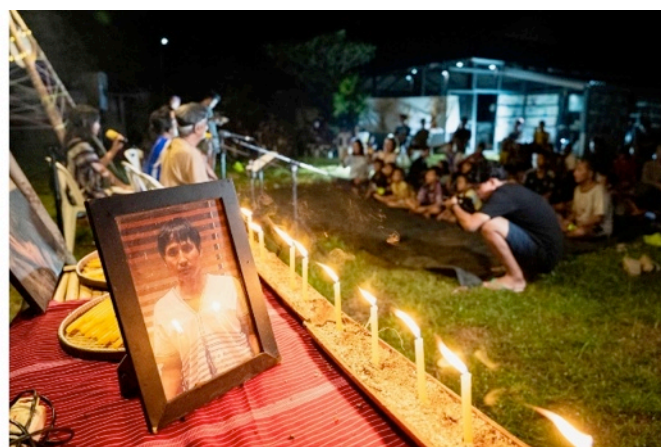
The Case of Billy

On 17 April 2014, the well-known Karen community rights defender, Porlajee Rakjongcharoen alias Billy, was declared a victim of enforced disappearance. He was last seen when he was arrested by Chaiwat Limlikitaksorn, the Chief of Kaeng Krachan National Park (KKNP), for allegedly illegally possessing a wild bee honeycomb and six bottles of honey. In June 2018, the Department of Special Investigation (DSI) of the

Ministry of Justice (MOJ) took up the case of the disappearance of Billy as a special case for investigation. On 3 September 2019, the DSI announced that human bone fragments were discovered in the Kaeng Krachan Dam reservoir. DNA tests of the fragments matched those conducted on Billy's mother, leading the DSI to conclude that the bones were Billy's and that he had been murdered.⁴ The DSI also announced that the investigation team found an oil barrel, its lid, two steel rods, a burned wooden piece together with the two bones at the bottom of the reservoir. The Central Institute of Forensic Science subsequently confirmed the genetic trace of one of the bones found inside the barrel matched that of Billy's mother. The investigation team then concluded it was part of Billy's remains. The condition of this piece of human skull, which was burned, cracked, and shrunk due to exposure to heat of 200 to 300 degrees Celsius, suggests the killers burned his body to conceal the crime. Till today the enforced disappearance of Billy has not yet been verified. The Cross Cultural Foundation (CrCF)

represented Billy's family in the cases in both criminal court and civil court related to the disappearance of Billy. Four park rangers had been acquitted on the murder charge, while the former national park chief Chaiwat Limlikit-aksorn was sentenced to prison, leaving a trail of unanswered questions. For the family, the quest for justice continues.⁵

After eleven years, Billy's family—his mother, wife, and five children—filed the civil lawsuit on 4 April 2024 against the Department of National Parks, Wildlife and Plant Conservation, seeking over twenty-six million Baht in damages under the Act on Tort Liability of Officials B.E. 2539. The lawsuit alleged that National Park officers committed a tort by abducting and killing Billy, resulting in damages that include financial loss, mental suffering, and the loss of household labor and support. But the long-awaited civil lawsuit faces yet another delay. Initially scheduled for 21 February 2025, the plaintiff's witness examination in Civil Court case no. P1459/2024 was postponed following a decision by the court to wait for the final judgment in the related criminal



Prayer vigil for Billy and other members of Karen-Bangkoi-Jai Paen Din who died (2024)

case, currently under appeal at the Central Criminal Court for Corruption and Misconduct Cases.⁶

From Poor Nutrition to Health Issues

The health care and basic needs of the Karen community were seriously affected during and post-COVID pandemic. For example, in 2021, eleven breastfeeding mothers had no breastmilk for their babies in the Lower Bang Kloi village, and a three-month old disabled child had to be brought to the hospital due to malnutrition. Others were infected with COVID 19 aside from health problems such as fever, heavy breathing and shaking hands and feet.

Without fertile land in the resettlement area to use, many young Karens had to find work in the city in order to feed their family. The Karens are still facing acute food insecurity and

malnutrition as a result of having no access to their traditional means of subsistence (foraging food in the forest, collecting wild honey, and rotational farming) since they have been barred from entering the national parks.

The government has not yet conducted the mandatory forest survey under Article 65 of the National Park Act (2019). For this reason, villagers do not know the exact zone of the forest where they are allowed to harvest food for survival. Most of the villagers rely on donated food, such as rice, instant noodles, and canned fish with low nutritional value. During the COVID-19 pandemic, they were unable to work and earn enough money to provide nutritious food for their families. Besides the health and livelihood issues, there are also existing rights violations as discussed below.

Other Human Rights Violations

In March 2021, eighty-five villagers were forcibly relocated by helicopter, and twenty-two were detained, including women, mothers separated from infants, and a person with a disability. The detainees were coerced into signing documents written in a language they could not read, denied timely access to legal counsel, and charged with encroachment under the National Park Act, carrying penalties of up to twenty years of imprisonment and heavy fines. Humiliating practices, such as forcing men to shave their hair—a sacred symbol of identity—further deepened the abuse.

Despite call from the civil society to drop the charges, twenty-eight Karen-Bangkoi villagers still face prosecution. The government's attempt at a resolving the cases through a committee excluded Karen representatives, and failed to have any meaningful progress after many months.

In 2025, the case of the twenty-eight Karen-Bangkoi villagers is still pending at Petchaburi Prosecutor's office with pressure from a nationwide advocacy via #SaveBangkloi⁷ movement together with Council of Indigenous Peoples in Thailand (CIPT). If the prosecutor decides to press charges, bail can be set at 100,000 Baht per person, or 2.7-million Baht in total - an extraordinarily high



Bangkoi resettlement area (2024)

sum for villagers of extremely limited income.

A couple of years earlier, on 25 May 2023, Gib Tonnampen, a woman human rights defender from this village died due to the delay in detecting that she got dengue. Her husband brought her to the Kaengkachan Hospital, a three-hour-drive away from her village on 22 May 2023. The delay in detecting the disease and the poor emergency medical assistance caused her death. Children in 2024 and 2025 were suffering from lack of urgent medical treatment.

Concluding Remarks

With the commitment that the Thai state and UNESCO jointly established in listing the Kaengkachan area as a Natural World Heritage Site in 2021, there is a need to ensure that the conditions on World Heritage Site management on respect for Indigenous rights are followed.⁸ In addition, there is an urgent need for the Thai state and UNESCO to establish an independent monitoring of the human rights situation in Kaengkachan pursuant to the Act on the Protection and Promotion of the Way of Life of Ethnic Groups, a legal basis for them to act together on this matter. There is also an urgent need to provide humanitarian aid in terms of food supply and healthcare in Karen-Bangkoi- Jai Paen Din community, Kaengkachan which is in danger of extinction.

The Karen community in Bangkoi represents an extreme case of an ideology in Thailand denying the existence of

indigenous peoples. This ideology has tragic, intergenerational effects on their way of life. Repressive measures reached an extreme form with the enforced disappearance of Billy in 2014, the impact of COVID-19 and the possible extinction of Karen, a protected population in Bangkoi. The impact of poor nutrition and health issues on the Karen community in Bangkoi reveals to the world that Thailand was no longer concealing its systematic discrimination against this indigenous community—whom the Thai state is internationally obligated to protect.

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Endnotes

1 His Majesty the King of Thailand issued on 19 September 2025 a Royal Command promulgating the Act on the Protection and Promotion of the Way of Life of Ethnic Groups. The law took effect on the same day.

- 2 Legal protection for ethnic groups, *The Bangkok Post*, 29 September 2024, www.bangkokpost.com/opinion/opinion/2874097/legal-protection-for-ethnic.
- 3 See United Nations Treaty Collection, https://treaties.un.org/pages/viewdetails.aspx?src=treaty&mtdsg_no=iv-2&chapter=4&clang=en.
- 4 Since 2021, the DSI has offered protection to Pinnapa Pruksaphan, the wife of Porlachee Rakjongcharoan, under its protection program.
- 5 Activists want Chaiwat sacked over 'Billy' disappearance, *Bangkok Post*, 21 April 2023, www.bangkokpost.com/thailand/general/2554334/activists-want-chaiwat-sacked-over-billy-disappearance.
- 6 Delay in Billy's Family's Civil Lawsuit Against the Department of National Parks, Cross Cultural Foundation, 13 February 2025, crcfthailand.org/2025/02/13/58138/.
- 7 #Savebangkloi Coalition is a group of youth activists organized to raise awareness of the issue of Indigenous Peoples and in particular responding to multi discrimination against Karen in Kaeng Krachan National Park prior to UNESCO world heritage campaign by the Thai government without prior informed consent from the local communities. The coalition was formed in 2021 and continued its efforts of raising awareness among the young population to understand the diverse backgrounds of Indigenous peoples in Thailand.
- 8 See World Heritage and Indigenous Peoples, UNESCO, <https://whc.unesco.org/en/activities/496/>.

Precarious Bang Kloi Lives, and Enforced Ethnic Enclosure Amidst the Disputed Natural World Heritage

Jarik Krobtong

The traditional Karen way of living relies on crop lands located in most cases in mountainous and steep areas. In this case, using fire is not an option but a must. The Karens have a system of rotation cultivation of their crop lands, ideally a seven-year period. In one year, only one crop is heavily cultivated (mainly rice) in one part of the land. The crop (such as rice) grown the year before nourishes multiple crops such as fruit trees and also tubers and beans. In the other years, rice rotation continues on other parts of the land. This system allows crops such as fruit trees to continue bearing fruits, turning into orchards, becoming fully regenerated into a forest-like land with fertile soil, and becoming ready for the return of rice cultivation years later. This type of “rotational farming” practiced by the Karen community requires only seven parts of the land to be used differently in a year. Satellite images would show only a single part as cultivated land, while the other parts are in different stages of regeneration into forest-like fallow lands. The Karens have names for each year of growing crops and making lands lie fallow.

However, this type of land use was once recognized as “unconventional” or “ineffective” by the Food and

Agriculture Organization (FAO) (Luangaramsri, 2001, 2002), while Thai conservation sectors and institutions might have considered it as a threat to the unique nature of the place as depicted in the historical construction of the discourse *Rai Luan Loi/Loy* (Shifting Cultivation) historically used to stigmatize and marginalize the Karens as the forest destroyers (Forsyth & Walker, 2008).

Precarious Bang Kloi Lives

The Karens suffered forced relocation and questionable land allocation several times; the first time in 1995-96, then in 2010-2011 with ‘Yuthakarn Tenasserim’ (Operation Tennasserim) involving the burning of Karen rice silo, resorted by a joint force of the Department of National Park and the military (Keawakho CrCF, 2021 and Pornphen Khongkachonkiet in this issue), and under *Yutthakarnpitakphatonnampetch* (Operation Tonnampetch Watershed Defense), also a joint operation of the Department of National Park and the Thai internal security sectors (military) that led to the arrest of more than forty Karens who decided to return to a place near their original homeland. They later faced criminal charges in court. These incidents violated the basic human rights

of the Karens along with the loss of self-determination and cosmological perception tied to their culture of rotation cultivation as shown in this dialogue with Jor Kla on 22 July 2023:

I am here, I cannot ‘*Tham Rai*’ [cultivate land]. I could not remember the age of my youngest child anymore as when I am at Khang Bon [referring to Upper Bang Kloi] where I could cultivate, and counted my eldest son's age by that. But being here I could not count, I don't know how to... I miss my eldest child dearly as he and his younger brother have to work in Bangkok, and I am so sick that I could not work hard anymore. And I don't know how much longer I could keep on.

Jor Kla reflected on his grievances after more than a year of exhaustive travelling to attend hearings on court charges of “encroachment” under multiple conservation laws effective in 2021. He did not know how to count years the way urban people do (due to his language difficulty and low education level).

Jor Kla's eldest son (18 years old in 2023), like members of many Bang Kloi families, had to move to Bangkok to find a job. He had to endure double



A bag of vegetables from Jor Kla being delivered to his oldest son in Bangkok (July 2023)

difficulties as an ethnic person and a laborer by suffering cuts in wages and other forms of exploitation. His younger brother came with him to Bangkok. If Jor Kla's family had not been dislocated, both of his sons would work to put food on the family table by sowing seeds and chasing off birds that would come to their crops, or even learn from their parents and the Karen people about the culture of their way of life. As in any agriculture-based society, everyone in the family contributes to the family's production.

On the relocation site of the Bang Kloi community,

"It was not everyone that received the land allocation, my mother said they have us draw the lots for the land" – 'La Poh Po', A Bang Kloi youth leader interviewed on 17 March 2021 whose mother passed away in 2023 due to delayed dengue treatment.

"The new allocated lands are unsuitable for cultivation, where the soil is composed of rocks, and gravel and unable to grow the highland rice." – 'Por Kwa Sokarmor', a Bang

Kloi Human Rights Defender, interviewed on 17 March 2021.

Another Bang Kloi youth, Phi Be Kwaie, decided to become a waitress in Bangkok to support her mother, who was charged in 2021 with a criminal offense related to the forest.

Other members of her family avail of jobs in Bang Kloi under a royal initiative foundation such as her mother who make handicrafts. But the income from this job could not sustain her family:

"The wage, (my mother got) from sewing is just 170 THB a day, and it's been 3 months without getting paid"- *Phi Be Kwaie and her mother* on 26 November 2022

"The raft if my father could get it running would generate an income of around 400 THB, but finding bamboo nowadays [to make the raft] is difficult, and tourists usually come with someone appointed to do rafting." *Phi Be Kwaie and her Father* on 26 November 2022

The Bang Kloi people were evicted by force and re-settled in a place where another community resides and with whom they have to compete for the limited resources available that creates conflicts between them. As a result, they were stripped of the rights

to self-determination and to their own ways of living. This situation reduced their socio-cultural dignity and limited their economic capabilities, leading to the risk of losing their Karen cultural heritage.

Being treated as criminals (forest encroachers) even though they have lived in this forest for generations before it was named Kaeng Krachan Forest Complex (KKFC) makes them vulnerable and exposes them to more marginalization within Thai society. The memory of delayed justice for the enforced disappearance of a Bang Kloi leader led to a state of fear that living in a remote area would not make the law protect them.

Concluding Remarks

The underlying causes of the problems of the Bang Kloi community have been highlighted by many civil society organizations as well as activists, such as the notable #SaveBangKloi alliances (ภาคีSaveบางกลอย in Thai). While Thailand has declared to comply with all relevant United Nations declarations (such as the Universal Declaration of Human Rights and the United



Meal with Phi Be Kwaie's family (November 2022)

Nations Declaration on the Rights of Indigenous Peoples) their implementation at the national level has always been problematic. As shown by a Thai bureaucrat who described the Bang Kloi issue in 2021 as follows:

"First of all, I would like to say that in Thailand we don't have 'Chon Phao Peun Mueang' (indigenous people). Our country only has those who resided within Thai Land, some might be confused with the terms, But I would ensure that there are no IPs [Indigenous Peoples], after all these centuries, nowadays we might have what are called 'ethnic people' who after having inhabited Thailand, are Thais, even with different backgrounds...."

".... So, the terms between Indigenous and local people differ, such as in Australia, they have the aboriginal people, whilst in America they have the Native Americans. But, here in Thailand, Thai people have settled down generations ago, until the people like the Karens and other ethnics 'moved in' so then they have become 'the locals' not the indigenous. The term indigenous must only apply if they have lived there in Kaeng Krachan before Siam, but in that area, like 200-300 years I am sure, no one lived there, therefore, they are not indigenous people" – Warawut Silparcha, Minister of the Ministry of Natural Resources and Environment, interviewed by GreenNews (กรีนนิวส์, 2021) on 28 July 2021, after KKFC had become WHS.

Though Thailand has recently enacted the law entitled Act on the Protection and Promotion of the Way of Life of Ethnic Groups (2025), few of the core principles such as the self-determination and concept of cultural territories originally proposed by civil society organizations, academics, and other parties have been incorporated in Thai law.

This means continued advocacy to protect the rights of ethnic communities including participatory management of KFFC, working closely with the National Human Rights Commission of Thailand in addressing human rights issues (such as those related to UNDRIP), the development of pilot projects, and reconciliation of the community's economic, social, cultural, and spiritual needs with the KFFC. As one Karen puts it

"Our people are not against the Natural World Heritage idea. But the government knows that the Karen live peacefully in their area and yet they were not consulted before making the registration with UNESCO (*Por Kwa Sokamor*, interviewed July 2023).

With the precarious state of Bang Kloi people as a community and precarity as individuals, caused by the so-called "Green Militarization," the return to their original homeland (Jai Phan Din/ Bang Kloi Bon) is unclear. Nevertheless, this is an opportunity to rethink of the idea of World Heritage Site as referring only to "Natural Character" of a place while ignoring the intangible aspects of the Kaeng Krachan Karens'

cultural heritage, including their world view of themselves being part of nature. As some of them said

"Our father and mother told us that when we were born, the things surrounding the place where we were born were the best that we could nurture ourselves from." Phue, the current Bang Kloi Spiritual leader said in March 2021.

"I thought, the word '*Tham ma chat*' (Nature) was also including myself as my people, and aren't we all 'Born from Nature'?" Jor Tami Yor, Bang Kloi Karen spokesperson interviewed 25 November 2022.

It is time to reconsider, especially in the current time of multiple crises propagated by expanding commoditization, the meaning of "conservation of nature," and how we perceive ourselves existing with this decaying nature and cultures. We need to consider what Karen believes strongly, we are born from nature.

Jarik Krobtong is a graduate of forestry and an independent worker, who has been involved in the Thai land-forest social movements/civil society during his ethnographic journey for a social science masters degree in Chiangmai University which led him to Bang Kloi.

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Rethinking the Human Rights Challenge in Pacific Fishing Communities

Kofi Otumawu-Apreku and Rosalie Masu

Fishing is unequivocally critical to the lives of coastal communities in the Pacific Island Countries (PICs); for many, fishing is essential source of food supply and protein, since other sources are often not readily available (Govella, 2024). For example, in PICs fishing is intimately interconnected with food, social, economic, personal, environmental and community security, with key areas of vulnerability stemming from the heavy reliance on the oceans (Govella, 2024). Fisheries, being important to coastal developing countries, need to be sustainably exploited to address food inadequacy, food deprivation, and food security concerns of coastal communities.

Addressing the human rights challenge in the PICs' fishing industry, Otumawu-Apreku, et al. (2024), examined the nature and drivers of rights violation in specific country contexts. The authors identified a number of drivers that force migrant workers and coastal communities to fall prey to rights abuse in the industry. In particular, they point out social pressures, economic motives, poverty, misinformation, and hunger, as crucial forces pushing young and

unsuspecting men and women into exploitation and abuse.

Fishing Communities

PICs are mostly dispersed landmasses with vast water coverage (Otumawu-Apreku et al. 2024), comprising of three main ethno-geographic groupings (Melanesia, Micronesia and Polynesia). PICs' food systems significantly contribute to global food supply chain (FAO and WFP, 2022), including tuna. The Western Central Pacific Ocean (WCPO), home to the PICs, account for over half (54 percent) of the world's tuna supply, with estimated value of US\$5.8 billion caught in the PICs (Azmi and Hanich, 2021; Williams and Ruaia, 2020). The rich tuna industry, notwithstanding, PICs are characterized by small economies, remain largely agrarian, and depend on primary resource extraction, tourism, remittances, foreign aid, imported food and other commodities (FAO and WFP, 2022). Typical of archipelagic states, communities in PICs are generally far removed from the urban centers, and depend largely on fishing for food and livelihood. Consequently, in spite of the rich tuna resources, the rural coastal communities in PICs remain vulnerable to a number of challenges, including

food insecurity; largely dictated by climate change, and worsened by rising cost of food and high global fuel prices.

A recent report by the Food and Agricultural Organization and World Food Programme (FAO and WFP) indicate that rising food prices not only threaten the communities' food systems but put their food security and livelihoods at further risk (FAO and WFP, 2022) and, thus, exacerbating the food insecurity challenge. Food security, nutrition, and livelihood monitoring by WFP since 2020 in a number of PICs including Fiji, Vanuatu, Tonga, Kiribati and Samoa, shows that significant proportion of households has poor to borderline food consumption scores, with notable shift in consumption to cheaper food options to address financial challenges (FAO and WFP, 2022). High prevalence of non-communicable diseases and climate change threat to food systems make food security an overarching issue to address in the communities. Mitigating food security shocks through country-led programs that boost production and productivity, and address gender disparities especially in fisheries, is a priority.

Human Rights, Resource Conservation and Implication for Food Security

Addressing the human rights question in coastal communities is not only a food security issue, it is also a subject of resource conservation, improvement in socioeconomic circumstances of the vulnerable in coastal communities, provision of livelihood options, and strengthening of cultural systems and values that promote equity and equality among men, women, and the youth. The central assumption here is that all else being equal addressing the fundamental challenges will promote resource sustainability, enhance individual and states' capabilities to safeguard food security and eradicate, or significantly reduce, basic forces that put individuals into traps of economic deprivation, make them vulnerable and drive them into circumstances of human rights abuse. Ratner, et al. (2014) point out that vulnerable people whose human rights are routinely violated do not make effective guardians of fishing rights or environmental stewards. It is particularly perilous for fishing communities whose source of food security and livelihood is heavily dependent on fishery resources, if the future stewards (the children) remain vulnerable to human rights challenges.

Tackling the right-to-food question as a human rights subject should therefore not be limited to resolving a vulnerability challenge alone, but should provide inroad into gaining local trust and subsequently addressing resource management

challenges (Ratner et al., 2014). This implies that effective management of fisheries resources requires putting human rights at the center of the value-chain equation. Small-scale fishers account for over 90 percent of the world's fishers, and need to be central to any attempts at reforming fisheries management and governance; reforms that seek to identify and tackle the challenges of fisherfolks in fishing communities (Allison et al., 2012). Fishing and fishing activities have been shown to impact food, economic, personal and community security (Govella, 2024); echoing the point that fisheries reforms that resolve property rights should be complemented by efforts to analyze and advance human rights in fishing communities more broadly (Ratner et al., 2014).

Improving resource conservation and ensuring that fisheries sectors generate net positive economic contributions has been a major focus of Regional Fisheries Management Organizations, such as the Pacific Islands Forum Fisheries Agency (FFA) (FFA, 2020), major development agencies, including the World Bank, as well as global initiatives such as the Global Partnership for Oceans (Ratner et al., 2014). There is also growing attention to tackling the human rights question in the sector in recent times (Otumawu-Apreku et al., 2024). It is, however, important to note that FAO's adoption of the Right to Food in 2005, leading to a wider adoption of rights-based approaches in its technical assistance and normative programming (FAO,

2009), has brought significant attention to the human rights dimension of food security. Human rights abuses in the fisheries industry pose substantial threat to the overall sustainability of fisheries globally (Otumawu-Apreku et al., 2024; Watson and Kelling, 2024), affect all facets of human security and, importantly directly and indirectly, affect food security (Govella, 2024). Adopting the Capability Approach that provides direct support for a broad characterization of fundamental freedoms and human rights (of small-scale fishers) that takes account of poverty, hunger and starvation as freedom-restricting conditions (Willmann et al., 2017), is not only desirable but essential.

Human rights-based approach (HRBA) is critical in small-scale fisheries management; besides its recognition of non-economic benefits derived from marine resources, it complements fisheries-focused rights-based management to promote conservation and ensure sustainable extraction of the resource intergenerationally. Recognizing the importance of HRBA in coastal fisheries, PICs are working to improve food and nutrition, increase rural income and livelihoods, with a focus on empowerment, especially of women. The effort includes gender assessments in several countries, including Fiji, Samoa, Solomon Islands, Tonga and Vanuatu (Graham & D'Andrea, 2021). *A new song for coastal fisheries - pathways to change (Noumea Strategy)*, for example, seeks to address rights concerns: empowerment of coastal communities; reliance

on community-based fisheries management; equitable access to benefits and decision-making within communities, including women, youth and marginalized groups; and diversifying sustainable livelihoods for coastal communities to generate income (O'Connor et al. 2023; Graham & D'Andrea, 2021).

Conclusion

Human rights abuses in the fisheries industry are closely tied to the food crisis facing many coastal communities, particularly in small island developing states and other developing regions. These violations stem from entrenched socioeconomic vulnerabilities, including poverty, hunger, lack of education and limited livelihood opportunities, which make individuals, especially women and children, highly susceptible to exploitation. The effects extend beyond individual suffering; when communities are denied their right to adequate food and fair employment, they lose economic stability, social cohesion, and the capacity to manage marine resources sustainably. Practices such as "Sex for Fish" exemplify how food insecurity can normalize exploitation, perpetuate gender inequality, and trap future generations in cycles of deprivation, thereby undermining environmental stewardship and the long-term health of fisheries.

Addressing these interconnected challenges demands a rights-based approach to fisheries governance that embeds human security, particularly the right to food, at the core of policy and

practice. Tackling root causes requires integrated measures such as poverty alleviation, equitable access to education, livelihood diversification, stronger social protection, and culturally sensitive interventions that challenge harmful norms while respecting community values. Enforcing labor standards, strengthening anti-trafficking laws, and ensuring fair working conditions are essential to breaking the link between exploitation and resource depletion. International and regional frameworks provide valuable policy guidance, but lasting change will require coordinated action among governments, communities, civil society and development partners. Ultimately, sustainable fisheries cannot be achieved without social justice; protecting human rights is not only a moral imperative but also a strategic necessity to ensure food security, safeguard marine ecosystems, and empower coastal communities to thrive as stewards of the resources on which they depend.

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References

- Allison, E. H., Ratner, B. D., Asgard, B., Willmann, R., Pomeroy, R. and Kurien, J. 2012. "Rights-based fisheries governance: from fishing rights to human rights," *Fish and Fisheries*, Vol. 13, pp. 14–29. DOI: 10.1111/j.1467-2979.2011.00405.
- Azmi, K., and Q. Hanich, Q. 2021. "Mapping interests in the tuna fisheries of the Western and Central Pacific Ocean," *Ocean Coast. Manag.* Volume 212 (15) 105779, doi.org/10.1016/j.ocecoaman.2021.105779
- FAO. 2009. *Securing Sustainable Small-scale Fisheries: Bringing Together Responsible Fisheries and Social Development*. Food and Agriculture Organization of the United Nations Committee on Fisheries, Twenty-eighth session FAO, Rome.
- FAO and WFP. 2022. "Pacific Island Countries: Impact of rising costs of food, feed, fuel, fertilizer and finance," *Food and Agricultural Organization & World Food Programme Bulletin*, Issue No.1 <https://openknowledge.fao.org/server/api/core/bitstreams/13e42fef-ab37-43eb-87bf-cf9a6f32a745/content> (accessed 5 July 2025)
- FFA. 2020. *Economic and Development Indicators and Statistics: Tuna Fisheries of the Western and Central Pacific Ocean*, pp. 74. Fisheries Forum Agency, Honiara, Solomon Islands. (accessed 2 April 2022).
- Govella, K. 2024. *Fishing, Human Security, and Transboundary Maritime Challenges in the Pacific Islands Region*. Center for Indo-Pacific Affairs, University of Hawai'i at M_{noa} <https://manoa.hawaii.edu/indopacificaffairs/article/fishing-human-security-and-transboundary-maritime-challenges-in-the-pacific-islands-region/> (accessed 8 August 2025)

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Public Housing as a Human Right and the Role of BIM in Asia

Maggie Wu Wai Chung

The right to adequate housing is one of the most widely recognized elements of international human rights law. It appears in the Universal Declaration of Human Rights (Article 25)¹ and the International Covenant on Economic, Social and Cultural Rights (Article 11),² both of which affirm that every person should have access to housing that supports their health, safety, and dignity. Yet in many cities across Asia, providing such housing is a constant struggle.

Public housing has been central to addressing this challenge. From Hong Kong's high-rise estates to Singapore's planned new towns, these programs have enabled millions to live in secure, affordable homes. But the task is becoming more complex. Cities are growing denser, environmental sustainability is now an urgent policy priority, and public expectations about quality of life are rising.

In this context, Building Information Modelling (BIM) has emerged as a powerful tool for delivering public housing that meets the needs of today while preparing for the demands of tomorrow. Although BIM was initially developed to coordinate design and construction, it is now increasingly recognized as a strategic enabler for realizing

the human right to housing in a sustainable, cost-effective, and socially inclusive way.

The Asian Context for Housing Rights

Housing rights in Asia are shaped by diverse economic, geographic, and social realities. Hong Kong, one of the most expensive housing markets in the world, has developed a vast public housing system to accommodate around 30 percent of its population. The Hong Kong Housing Authority (HKHA) builds and manages both public rental housing and subsidized home ownership schemes, providing a lifeline for residents who cannot compete in the private market.

Singapore presents a different model. Through the Housing & Development Board (HDB), over 80 percent of residents live in government-built flats. These developments range from older estates that now require upgrading to new projects like Tengah New Town, designed from the outset to integrate green corridors, energy-efficient buildings, and accessible public spaces.

Elsewhere in the region, the challenges are more basic. In Indonesia, millions live in informal settlements without secure tenure or proper

infrastructure. In Bangkok and Manila, relocation from flood-prone or unsafe areas must be balanced with access to jobs, schools, and social networks. In all these settings, the right to housing is about more than physical shelter—it encompasses habitability, affordability, accessibility, and environmental sustainability.

BIM: From Digital Model to Policy Instrument

BIM is not simply a drafting tool. At its core, it is a collaborative process that creates and manages detailed information about a building over its entire life cycle—from initial feasibility studies and design through construction, operation, and eventual refurbishment or demolition.

A BIM model is far more than a 3D visual. It integrates architectural layouts, structural systems, building services, environmental data, and cost information into a single coordinated platform. Stakeholders can run simulations to test daylight access, airflow, energy use, and construction sequencing; detect potential clashes between mechanical and structural components; and plan maintenance strategies decades into the future.

When public housing agencies adopt BIM, they are not just modernizing their workflows. They are equipping themselves with a comprehensive decision-making environment that can reconcile human rights obligations, environmental goals, and budget realities.

Hong Kong's Experiences

Hong Kong is one of the earliest adopters of BIM in the public housing sector. Since 2014, the HKHA has mandated BIM for all new projects from the design stage.³ The Au Tau Public Estate in Yuen Long illustrates how deeply BIM is now embedded in the city's housing policy.

From the outset, the project team used BIM to conduct daylight and shadow studies, wind flow simulations, and solar heat gain analyses. These informed adjustments to building orientation, façade design, and window placement maximize natural ventilation and lighting while minimizing overheating. A glare analysis ensured that photovoltaic (PV) panels would function efficiently without creating visual discomfort for neighboring buildings.

BIM was equally influential during construction planning. The project used prefabricated modular units, virtually assembled in the BIM environment to check alignment and integrate plumbing, electrical, and ventilation systems before reaching the site. This reduced the likelihood of costly errors, improved coordination between trades, and shortened the repetitive floor construction cycle to just



Public housing in Au Tau, Hong Kong
Photo credit: Hong Kong Housing Authority

six days. Such efficiency benefits are critical in Hong Kong, where the demand for public housing far outstrips supply.

Regional Practices

Other Asian cities have adapted BIM to their own priorities. In Singapore, HDB uses BIM not only for building design but also for district-level planning. The development of Tengah New Town demonstrates this integrated approach.⁴ BIM models have guided the positioning of residential blocks to optimize natural ventilation, avoid heat traps, and ensure that public spaces receive adequate daylight. Infrastructure such as district cooling plants and cycling networks is planned in the same environment, allowing early identification of conflicts and opportunities for synergy.

In Bangkok, where flooding is a recurrent hazard, public housing agencies have combined BIM with Geographic

Information Systems (GIS) to model water flows and drainage patterns. This has led to designs that incorporate elevated walkways, flood-resistant ground floors, and strategically placed retention basins.

In Indonesia, pilot projects in Surabaya and Medan have applied BIM to optimize the internal layouts of affordable housing blocks. The aim is to reduce material waste, improve cross-ventilation, and ensure that communal facilities are well located within each development.

In Malaysia, state housing boards are beginning to adopt BIM for large-scale housing in Penang and Johor. Early trials focus on using BIM for cost control and prefabrication, aiming to replicate Hong Kong's gains in construction efficiency. Meanwhile, Vietnam has started incorporating BIM into urban regeneration projects in Hanoi and Ho Chi Minh City, where the challenge is replacing

deteriorating apartment blocks with modern, energy-efficient buildings while minimizing displacement.

Environmental Sustainability as a Housing Right

The right to adequate housing increasingly includes the right to live in an environment that does not harm health or well-being. Buildings are responsible for roughly 40 percent of energy use and a significant share of greenhouse gas emissions. Poorly designed housing can expose residents to excessive heat, inadequate light, and high utility costs.

BIM's analytical capabilities allow environmental performance to be addressed at the design stage. In Hong Kong, energy simulations have informed decisions about insulation levels, shading devices, and photovoltaic panels installation. In Singapore, sun-path and wind flow studies have helped shape building massing to enhance thermal comfort without mechanical cooling. In Kuala Lumpur and Manila, similar techniques have been used to increase resilience against extreme weather events.

Such measures directly benefit residents by reducing energy expenses and improving indoor environmental quality. They also contribute to national climate commitments, aligning housing policy with broader sustainability goals.

Economic Efficiency and Lifecycle Value

Public housing agencies operate under tight budget constraints.

One of BIM's most valuable features is 5D integration, which links design elements to cost and schedule data. This allows project teams to forecast cash flows accurately, avoid budget overruns, and adjust plans before construction begins.

The economic advantages extend well beyond project completion. BIM models can be linked to facility management systems, serving as detailed "as-built" records that track every component. In Hong Kong, maintenance teams use BIM combined with RFID tags to quickly locate and service building elements, from fire doors to water pumps. This reduces downtime, lowers maintenance costs, and prolongs the functional life of housing estates.

Overcoming Barriers to Adoption

Despite its benefits, BIM adoption in public housing is not yet universal. The initial costs of software, hardware, and training can be high, and some contractors are reluctant to change established practices. Smaller municipalities may also lack the technical staff to implement BIM effectively.

Hong Kong's response has been to create a BIM Centre, an in-house consultancy that supports more than 2,000 users across the Housing Authority. The Centre develops standards, provides technical assistance, and organizes training for architects, engineers, quantity surveyors, and site staff. Singapore has taken a complementary path, offering government-funded training

programs and requiring BIM use in major public projects.

Capacity-building is as important as technology adoption. Without skilled professionals who can fully exploit BIM's potential, the investment will not yield its full value. Establishing regional knowledge-sharing platforms—perhaps under the auspices of ASEAN or other multilateral bodies—could accelerate the spread of best practices and reduce duplication of effort. As more public housing agencies adopt BIM, shared libraries of building components, environmental data, and cost benchmarks could further enhance efficiency and quality across borders.

The Way Forward

As Asia's cities continue to grow, the pressures on public housing systems will only intensify. Rising land values, climate change, and demographic shifts will challenge governments to deliver more housing, more quickly, and to higher standards.

BIM is not a cure-all, but it offers a framework for aligning human rights principles with practical delivery. By enabling early design optimization, improving construction coordination, and supporting long-term asset management, BIM can help ensure that public housing fulfills its role as both a social safety net and a foundation for sustainable urban development.

Conclusion

Public housing is one of the clearest expressions of a

society's commitment to the right to adequate housing. In Asia, fulfilling this right is inseparable from the challenges of building at scale, managing costs, and protecting the environment.

The experiences of Hong Kong, Singapore, Bangkok, and emerging projects in Indonesia, Malaysia and Vietnam demonstrate that BIM can play a central role in meeting these challenges. It enables better-informed decisions, reduces waste, and integrates

sustainability into every stage of the housing life cycle.

By institutionalizing BIM within public housing policy, governments can move beyond simply providing shelter to creating well-planned, resilient communities. In doing so, they uphold not only the letter of the human right to housing but its spirit—delivering homes that support dignity, equity, and the well-being of present and future generations.

Endnotes

- 1 United Nations, Universal Declaration of Human Rights, Article 25 (1948).
- 2 United Nations, International Covenant on Economic, Social and Cultural Rights, Article 11 (1966).
- 3 Hong Kong Housing Authority, *Application of Building Information Modelling in Public Housing Development*, 2024.
- 4 Building and Construction Authority (Singapore), *Tengah New Town: Smart and Sustainable Town*, 2023.
- 5 UN-Habitat, *The Right to Adequate Housing*, Fact Sheet No. 21, Rev. 1, 2014.

Precarious Bang Kloi Lives, and Enforced Ethnic Enclosure Amidst the Disputed Natural World Heritage

(Continued from page 8)

References

Forsyth, T., & Walker, A. 2008. *Forest Guardians, Forest Destroyers: The Politics of Environmental Knowledge in Northern Thailand*. University of Washington Press. <https://silkwormbooks.com/pro>

[ducts/forest-guardians-forest-destroyers](https://silkwormbooks.com/pro).

Keawakho, A. 2021. Timeline: The Plight of the Karen Indigenous Peoples of Bang Kloi, CrCF, <https://crcfthailand.org/en/2021/03/17/15538/>.

Laungaramsri, P. 2002. "On the Politics of Nature Conservation in Thailand," *Kyoto Review of Southeast Asia*, <https://kyotoreview.org/issue-2-disaster-and-rehabilitation/on-t>

[he-politics-of-nature-conservation-in-thailand/](https://kyotoreview.org/issue-2-disaster-and-rehabilitation/on-t).

Laungaramsri, Pinkaew. 2001. *Redefining Nature: Karen Ecological Knowledge and the Challenge to the Modern Conservation Paradigm*. Vol. 1, Earthworm Books.

กรีนนิวส์. 2021. สัมภาษณ์พิเศษ "วราวุธ ศิลปอาชา" หลังมติแก้กระจำนเป็นมรดกโลก, <https://greennews.agency/?p=24676>.

Rethinking the Human Rights Challenge in Pacific Fishing Communities

(Continued from page 11)

Graham, A. and Ariella D'Andrea, A. 2021. *Gender and human rights in coastal fisheries and aquaculture: a comparative analysis of legislation in Fiji, Kiribati, Samoa, Solomon Islands, Tonga and Vanuatu*

O'Connor, S., D'Andrea, A., Recio-Blanco, X., and Devez, S. 2023. *Legal guide to enabling and strengthening coastal fisheries co-management in the Pacific*. Pacific Community (SPC) & Environmental Law Institute (ELI)

Otumawu-Apreku, K., Aqorao, T., Meke, F., and Saepioh, K. L. 2024. "Fishing activities in Pacific Island Countries: A human-rights perspective," *Marine Policy*, 161 106008. doi.org/10.1016/j.marpol.2024.106008

Ratner B. D., Åsgård B., Allison E. H. 2014. "Fishing for justice: Human rights, development, and fisheries sector reform," *Global Environmental Change*; vol. 27, pp. 120–130. doi.org/10.1016/j.gloenvcha

Williams, P., and Ruaia, T. 2020. Overview of tuna fisheries in the Western and Central Pacific Ocean, including economic conditions – 2019. A paper presented at the

16th WCPFC Scientific Committee Meeting (SC16).

<https://meetings.wcpfc.int/node/11677> (accessed 22 May 2023).

Willmann, R., Franz, N., Fuentevilla, C., McInerney, T. F., and Westlund, L. 2017, "A Human Rights-Based Approach to Securing Small-Scale Fisheries: A Quest for Development as Freedom," in Jentoft, S., Chuenpagdee, R., Barragán-Paladines, M., Franz, N., editors, *The Small-Scale Fisheries Guidelines*, MARE Publication Series, vol 14. Springer, Cham. doi.org/10.1007/978-3-319-55074-9_2.

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