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# Household Supply Access and Community Impact During Flood

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### ABSTRACT

This study explores the lived experiences of households in Kampung Paya Besar, Hulu Terengganu, during flood disasters, with a focus on access to basic supplies, challenges faced, coping mechanisms, and the role of community networks. Using a qualitative design, six semi-structure interviews were conducted with residents responsible for managing household supplies, and the data were analysed using a thematic analysis framework. The findings revealed that households obtained supplies through various strategies such as pre-flood shopping, wading through shallow waters, and using boats, although access often remained dependent on external aid. Challenges in accessing essential items were largely due to severe infrastructure damage, transportation breakdowns, and stock shortages, with the difficulties being more pronounced for vulnerable groups. To cope with shortages, households resorted to rationing food, sharing with neighbours, and stockpiling before the flood season, although these measures were often temporary. Community networks and institutions, including local leaders, mosques, NGOs, and government agencies, played important roles in delivering aid, however, mismatches between the aid provided and actual household needs persisted. Overall, the study highlights that while community resilience and informal networks are essential, systemic issues such as infrastructure limitations, uncoordinated aid distribution, and the absence of needs-based planning continue to hinder effective disaster response. Recommendations include establishing localised aid storage, providing customised relief packages, and enhancing community-based logistics training to strengthen preparedness and response in flood-prone rural areas.

## 1. Introduction

Flood events in Malaysia have shown an alarming upward trend in frequency and intensity, with rural households bearing disproportionate consequences. Existing scholarly literature disproportionately privileges recovery domains such as infrastructural rehabilitation, government agency collaboration, and macroeconomic stabilisation, whereas everyday household exigencies specifically, the procurement of food, potable water, pharmaceutical supplies, and sanitary materials are inadequately [8,23]. Challenges such as impeded access, fractured supply networks, and the insufficient alignment of delivered assistance with lived exigency compel households to draw on

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informal safety nets, encompassing neighbours, village leadership, and local religious bodies [11,26]. Although these spontaneous grassroots organisations frequently mobilise assistance with greater immediacy than formal disaster machineries, their capacity is contingent on the availability of local assets and the integrity of communication links. Kampung Paya Besar is a flood-prone rural settlement that experiences recurrent monsoon-related flooding, with water levels in recent events inundating residential areas for several days. These flood episodes frequently disrupt road access, local retail operations, and supply delivery routes, significantly affecting household access to necessities.

This investigation fills the existing empirical lacuna by employing qualitative methodologies to render a nuanced account of households lived realities during flooding episodes in Kampung Paya Besar, Hulu Terengganu. Through in-depth interviews, focus group discussions, and participant observation, the study illuminates the distinctive vulnerabilities encountered by inhabitants, the adaptive responses they mobilise, and the interplay of both institutional and grassroots support networks in mediating access to life-sustaining resources. Results foreground the imperative of disaster governance frameworks that transcend infrastructural redress and foreground the quotidian and affective dimensions of survival, recommending the systematic incorporation of experiential and emotional resilience logics into pre-event planning and post-event recovery protocol [6,18]. By rendering community narratives audible, the research strives to furnish evidence-based guidance for policymakers, non-governmental organisations, and community leaders, thereby fostering the co-construction of disaster readiness and recovery modalities that are inclusive, equitable, and responsive to situated needs.

## **2. Literature Review**

### *2.1 Understanding Flood Disasters in Rural Contexts*

Floods in rural settings induce effects beyond infrastructural loss: they sever everyday household supply chains and establish lasting humanitarian crises, driven by under engineered road systems, scant humanitarian presence, and the precariousness of local livelihoods [19]. Within the prevailing literature, the quantitative inclination frequently overlooks the subjective emotional and relational dimensions of the affected populations [8]. Furthermore, the empirical focus usually fails to capture the heterogeneity inherent in rural cohorts, particularly sidelining groups such as the elderly and persons with disabilities, whose exposures and adaptive capacities diverge strikingly from broader community averages [5]. To remedy these deficiencies, disaster management policies must foreground inclusivity by coupling technical design with an interrogation of social hierarchies, while also curbing the environmental drivers of flooding most notably, large-scale deforestation through community driven planning that respects indigenous social and cultural systems.

### *2.2 Household Level Disruptions to Basic Supply Access*

Flood events interrupt the delivery of core life-support systems namely, food, potable water, energy, and pharmaceuticals disproportionately threatening low-income and rural households [4, 15]. Subsequent episodes of water quality degradation and unpredictable fluctuations in food pricing compound vulnerability [12,13]. Current scholarship predominantly privileges large-scale datasets and metropolitan contexts, thereby neglecting the nuanced dynamics of rural supply chains and the intricate interdependencies among these critical infrastructures [24]. Equally troubling, the literature lacks participatory, bottom-up frameworks and integrative planning paradigms that interrogate the reciprocal linkages among water, food, and energy systems in the wake of hydrological extremes.

### *2.3 Lived Experiences of Flood-Affected Households*

Field acquired evidence indicates that flooding catastrophes incapacitate not just the distribution of material goods but also the delicate architecture of emotional equilibrium and informal caregiving infrastructures [7,16]. Caregivers predominantly female frequently subordinate personal necessities in service of dependent relatives, a choice that accumulates quantifiable and qualitative emotional debt in the aftermath of such events. The prevailing scholarship remains dominated by transient, snapshot assessments, systematically neglecting the longitudinal trajectories of vulnerability [9]. Analyses that employ explicitly intersectional lenses remain exceptional; as a result, the precise tribulations of women, older adults, and minority constituencies go largely unarticulated. Ocularly and programmatically, these convergences mandate that disaster mitigation frameworks explicitly integrate layered effects on health, food security, mobility channels, and the psycho-emotional reservoirs required for collective and individual resilience.

### *2.4 Coping Strategies Adopted by Households*

Flood-affected households resort to a range of coping mechanisms stockpiling dry food, raising the height of dwellings, and tapping into communal revolving loan funds findings echoed in the recent literature [2,17]. Concurrently, informal channels of communal reciprocity frequently absorb the delays and deficiencies in the distribution of formal humanitarian relief [25]. Despite this empirical richness, most research has surveyed coping practices at singular moments, thereby eliding the longitudinal alteration of strategies consequent upon recurrent floods. Furthermore, disaster governance remains largely normative, privileging externally conceived interventions relocation schemes and standardised in-kind assistance impregnated by cognitive and material residues of inapplicability thereby disrupting the very household calibrations of shelter, finance, and reciprocity that these practices constitute.

### *2.5 The Role of Support Systems during Floods*

Whether through planned mechanisms or spontaneous kindness, support systems remain decisive for sustaining supply access during flood events. Informal networks comprising kin, neighbours, and faith-based assemblies typically mobilise faster than institutional channels [15,21]. Contemporary scholarship, however, evaluates assistance solely through volumetric metrics, that is, quantities of food, water, or medicine distributed, thereby neglecting the temporal dynamics of efficacy. Many rural contexts experience prolonged lag owing to the dual constraints of eroded transport networks and cumbersome administrative protocols; concurrently, the unpaid and often invisible stewardship that women practise to orchestrate, filter, and allocate arriving goods is systematically underestimated. Formal amalgamation of these informal transactions within disaster management legislation, training, and practice may, therefore, enhance the baseline resilience of entire communities, yielding multilayered dividends.

### *2.6 Emotional and Practical Impacts of Supply Disruption*

Logistical shortages precipitate pronounced emotional distress including pervasive anxiety and a chronic sense of helplessness among caregivers and structurally vulnerable populations [10,20]. Practically, disruptions cascade through healthcare, educational, and domestic spheres, dismantling established routines. Empirical literature typically confines itself to immediate, visible consequences,

neglecting the intersectional frameworks necessary for a comprehensive understanding, and neglecting the heterogeneous and compounding effects of overlapping identities and circumstances. Furthermore, theoretically sophisticated frameworks such as the Capabilities Approach and models of eco-anxiety have received comparatively scant application to these shortages, thereby constraining the analytic and normative grasp of the enduring psychological sequelae intrinsic to protracted supply interruptions.

### *2.7 Gaps in Existing Literature*

Flood research remains largely preoccupied with evaluating infrastructure repair and calculating financial losses, thereby overlooking the cumulative, long-term effects experienced within households and the emotional toll borne by affected populations [1]. Dominant methodologies remain predominantly quantitative and cross-sectional, which constrains insights, while genuinely participatory, community led frameworks are yet to be normatively adopted (Jiang et al., 2024). Furthermore, frameworks grounded in the Capabilities Approach, which could render visible the agency and aspirations of vulnerable parties, are infrequently operationalised, perpetuating the omission of left-behind groups in systematic analyses. Such empirical silences confer a practical inertia to post-disaster interventions, which consequently misalign with the culturally embedded social order, misapprehend dynamic community priorities, and underestimate longitudinal adjustment to flood phenomena [3,22].

## **3. Methodology**

Participants were selected based on their direct responsibility for managing household food and essential supplies during flood events. This criterion ensured that respondents possessed first-hand experience in decision-making related to supply access under disaster conditions, particularly during periods of restricted mobility and limited aid availability.

This investigation employed a qualitative single-case-study design to elucidate the lived experiences of Kampung Paya Besar households in Hulu Terengganu during flood episodes, concentrating specifically on the dynamics of securing vital provisions, namely food, potable water, pharmaceuticals, and hygiene materials. The qualitative paradigm was deemed superior owing to its capacity to yield deeply contextual, lived emotional registers that quantitative aggregates invariably obscure. Participant selection combined purposive and snowball sampling to ensure that flood survivors endowed with experiential authority were recruited; this procedure guaranteed the synthesis of heterogeneous viewpoints while paying particular attention to traditionally marginalised sectors, including the elderly, single headed households, and persons with differing abilities. Data were obtained exclusively via semi-structured interviews, each ranging from twenty to thirty minutes, thereby granting informants the latitude to articulate comprehensive narrations of their lived realities. The interviews produced dense, context-specific data that illuminated the intricate micro-dynamics of household adaptive behaviour under flood duress.

The analytical approach adopted in this inquiry employed thematic analysis, specifically calibrated to reveal enduring patterns and themes as articulated by participants, thereby anchoring the results in their vernacular and interpretative frameworks. Mandatory ethical safeguards encompassed the acquisition of informed consent, preservation of confidentiality, and real-time responsiveness to potential emotional distress, all of which were executed with rigor. By these means, the inquiry not only chronicled the operational and social impediments engendered by flood-induced interruptions to supply chains, but simultaneously illuminated the subtle, often

unrecognised, reservoirs of rural resilience and the tacit coping repertoires that households marshalled. The synthesis of these findings aspires to advance disaster management institutional memory by rendering it more inclusive, thereby strengthening responsiveness and efficacy across comparable rural settings.

#### 4. Results and Discussion

Discussion with six households impacted by flooding illuminated the diverse survival practices they employed to secure goods once the water rose. Households recounted pre-event purchases, passage through submerged streets with rice and cooking oil on shoulders, barter on small outriggers, and solicitation of nearby wells of expertise and generosity, including non-governmental organisations and local volunteers. Yet persistent access constraints shelves emptied, retail spaces boarded, barricades erected by deep water or by bridges given up to surge currents rendered many previously simple transactions arduously precarious. Members of visibly fragile social categories caretakers of infants or patients confined to persistent illness bore the heaviest disproportion, repeatedly scouring the environment for infant formula, sterile nappies, and packages of essential pharmaceuticals. Acute, sustained stress rippled through the households until, and soon after, the first shipments of ready-to-eat packages arrived.

Anticipatory limits to purchased, scavenged, or received food led households to institute rationing, permit gradual rice pilaf heaping and to privilege canned and dry sources of energy. Reciprocity sustained behaviour: women exchanged fried-to-dry fish for oil, men apportioned home-dried beans, elders extricated remaining nets and kitchen gardens to see small amounts of leaf to neighbouring yards. A portion of respondents, having returned to precarious residence, reported deliberate, small-scale stockpiles pressed into interior grain bins or concealed timber cellars. While unofficial structures collective committee of households, women's committee attached to the mosque, extricated ex-classroom shelters performed daily, sporadic, and sometimes unqualified supplementary redistribution, many shipments of relief incompletely arrived or arrived late, detained by rolled condensation of water or debris. Households recommended in advance: portions of self-resetting stored dry goods positioned at educational-security warehouses, shipments of relief apportioned to those in need of special dry goods, and small, retrofitted outriggers moved, when water permitted, to make the first journey to glucose-based packages.

**Table 1**  
Thematic analysis matrix

RQ	Sub-Theme	Findings Summary	Sample Quotes
RQ1: How do households experience the process of obtaining basic supplies during a flood?	Methods of accessing supplies	Households accessed supplies by pre-flood shopping, wading through water, using boats, and relying on aid delivery.	"We walked through shallow areas to reach the nearest shop before the water got too high." (P1) "Before the water rose too high, we managed to go to the nearest mini market." (P2)
	Availability and quantity of supplies	Most households obtained only partial needs due to stock shortages and shop closures.	"Not everything. Many items were out of stock, and some shops were closed due to flooding." (P1)

	Emotional experiences	Participants expressed stress, worry, and later relief when aid arrived.	"It was stressful and worrying, especially thinking about the children's needs." (P2)
RQ2: What are the key challenges in accessing essential items during a disaster?	Infrastructure and accessibility barriers	Flooded roads, damaged bridges, and deep water hindered transportation.	"Roads were blocked by water, so we could only use boats or walk." (P1)
	Logistical constraints	Limited transport options, inability to use vehicles, and depleted stock in shops.	"Our car was stuck because the engine would get damaged if we used it." (P2)
	Special needs and vulnerable groups	Infants and chronically ill members required items that were difficult to obtain.	"We had a toddler who needed milk and diapers, which were difficult to get." (P1)
RQ3: What strategies do households use to cope with supply shortages?	Resource management	Rationing meals, reducing portions, and prioritising long-lasting food.	"We had to reduce both the quantity and frequency of meals in case the flood persisted." (P1)
	Social support and sharing	Exchanging and borrowing supplies from neighbours or relatives.	"We exchanged items with neighbours... cooking oil for canned food." (P1)
	Preparedness for future floods	Stockpiling water, dry food, medicines, and emergency tools before flood season.	"We now keep a stock of dry food, bottled water, and some emergency medicine." (P2)
RQ4: How do community networks and institutions support or hinder supply access?	Sources of support	Help came from neighbours, NGOs, village committees, mosques, and government agencies.	"The village committee, some NGO volunteers, and neighbours worked together to deliver supplies." (P1)
	Effectiveness of support	Aid was generally timely and helpful but sometimes lacked specific items.	"It was very helpful, but some essential items like baby formula and medicine were still lacking." (P1)
	Limitations and gaps	Some aid was delayed or failed to arrive due to access issues or unsuitable vehicles.	"One charity group couldn't reach us because the bridge was damaged." (P2)
	Recommendations for improvement	Suggestions included pre-positioned supplies, matching aid to needs, and providing boats.	"Each village should have a dedicated storage centre for emergency goods." (P5)

Table 1 distils the thematic analysis, identifying four primary themes in response to the study's objectives: household experiences of procuring supplies, barriers to accessing necessities, adaptive strategies adopted under scarcity, and the mobilising functions of communal and institutional networks. Respondents recounted sourcing provisions through anticipatory, pre-disaster purchasing; traversing inundated areas on foot; ferrying goods via small boats; and soliciting assistance from

neighbours, local bazaars, and formal aid agencies. Persistent obstacles persisted, however, owing to the closure of retail outlets, depletion of stock, and the fracturing of transportation routes, heightening anxiety in households harbouring infants, the disabled, and elderly adults.

The coping strategies illustrated in the table encompassed deliberate rationing of perishable and non-perishable provisions, prioritising calorically dense, shelf-stable products, orchestrated barter and donation within the neighbourhood, and the deliberate cultivation of subsistence caches to mitigate future shocks. Community structures immediate neighbours, non-governmental organisations, village waste management groups, local mosques, and, to a lesser extent, administrative agencies functioned as a supplementary safety net, though beneficiaries noted poor alignment between supplied and actual needs, compounded by latency in delivery. Recommended enhancements comprised developing strategically pre-positioned stockpiles, calibrating distributions to differential household demographics, and ensuring contingent, motorised watercraft capacity throughout anticipated flood surges.

## 5. Conclusion

This study explored how rural households in Kampung Paya Besar, Hulu Terengganu, accessed essential supplies during flood events. The findings show that households relied on pre-flood preparation, informal community support, and external aid to obtain food and necessities. However, access was frequently constrained by damaged infrastructure, flooded roads, and limited availability of goods, particularly during prolonged flooding.

Vulnerable households, including those with infants, elderly members, and individuals with chronic illnesses, faced greater difficulties in securing essential supplies. Coping strategies such as rationing food, sharing resources with neighbours, and short-term stockpiling reflect community resilience but remain fragile and highly dependent on existing social networks. Community institutions, including village committees, mosques, non-governmental organisations, and government agencies, helped mitigate shortages, although delays and mismatches between aid provided and actual household needs were reported.

As a qualitative single-case study involving six households, the findings are exploratory and not intended for statistical generalisation. The study did not explicitly examine factors such as household income, prior flood experience, or external market conditions, which may also influence access to essential supplies. Positioned within the disaster management and resilience literature, this study highlights the importance of incorporating household-level experiences into flood preparedness and response planning, particularly through needs-based relief coordination and locally grounded support mechanisms in flood-prone rural contexts. Future research may incorporate household surveys to assess the prevalence of supply access challenges identified in this study, particularly among vulnerable groups.

## References

- [1] Abid, Sheikh Kamran, Noralfishah Sulaiman, Ahmed M. Al-Wathinani, and Krzysztof Goniewicz. "Community-based flood mitigation in Malaysia: Enhancing public participation and policy effectiveness for sustainable resilience." *Journal of Global Health* 14 (2024): 04290.
- [2] Atwar Rahman. (2023). PRE-CRISIS ASSESSMENT OF MONSOON FLOODING IN BANGLADESH Humanitarian Coordination Task Team (HCTT) © foto 2 PRE-CRISIS ASSESSMENT OF MONSOON FLOODING IN BANGLADESH.
- [3] Barford, A., Proefke, R., Mugeere, A., & Stocking, B. (2023). Young People and Climate Change Young People and Climate Change 2.
- [4] Dargin, Jennifer, Alex Berk, and Ali Mostafavi. "Assessment of household-level food-energy-water nexus vulnerability during disasters." *Sustainable Cities and Society* 62 (2020): 102366. <https://doi.org/10.1016/j.scs.2020.102366>

- [5] De Ruyter, Thaïs, Dries S. Martens, Esmée M. Bijmens, Stefaan De Henauw, Tim S. Nawrot, and Nathalie Michels. "Exploring the impact of lifestyle and environmental exposures on appetite hormone levels in children and adolescents: An observational study." *Environmental Research* 252 (2024): 118846. <https://doi.org/10.1016/j.envres.2024.118846>
- [6] Dwinantoaji, Hastoro, Sakiko Kanbara, Mari Kinoshita, Satoru Yamada, Hasti Widyasamratri, and Mila Karmilah. "Factors related to intentions among community health cadres to participate in flood disaster risk reduction in Semarang, Indonesia." *European Journal of Molecular and Clinical Medicine* 7, no. 10 (2020): 1046-1063.
- [7] Gao, Jinlong, Jin Yang, Cheng Chen, and Wen Chen. "From 'forsaken site' to 'model village': Unraveling the multi-scalar process of rural revitalization in China." *Habitat International* 133 (2023): 102766. <https://doi.org/10.1016/j.habitatint.2023.102766>
- [8] Gaviola, Jon H., Sarah J. Beaven, and Thomas M. Wilson. "Filipino migrant worker organisations, social capital and disaster resilience: An Aotearoa-New Zealand case study." *International Journal of Disaster Risk Reduction* 108 (2024): 104523. <https://doi.org/10.1016/j.ijdrr.2024.104523>
- [9] Heredia, Marta Gayoso, Carmen Sánchez-Guevara Sánchez, and Francisco Javier Neila González. "Integrating lived experience: Qualitative methods for addressing energy poverty." *Renewable and Sustainable Energy Reviews* 189 (2024): 113917. <https://doi.org/10.1016/j.rser.2023.113917>
- [10] Greaves, Morten, and Rima Bahous. "A history of violence; exploring Lebanese university faculty mental health and professional lived experiences following the 4th of August 2020 port blast." *Teaching and Teacher Education* 125 (2023): 104048. <https://doi.org/10.1016/j.tate.2023.104048>
- [11] Hamidi, Abdur Rahim, Paula Novo, and Jouni Paavola. "Household flood resilience in the Nowshera district, Pakistan: A multidimensional analysis." *International Journal of Disaster Risk Reduction* 116 (2025): 105124. <https://doi.org/10.1016/j.ijdrr.2024.105124>
- [12] Herrador, Bernardo Guzman, Vidar Lund, Wenche Fonahn, Hege Hisdal, Hans Olav Hygen, Susanne Hyllestad, Zuzana Nordeng et al. "Heavy weather events, water quality and gastroenteritis in Norway." *One Health* 13 (2021): 100297. <https://doi.org/10.1016/j.onehlt.2021.100297>
- [13] Hodjo, Manzamaso, Timothy J. Dalton, and Tebila Nakelse. "Welfare effects from food price shocks and land constraints in Niger." *Journal of Agriculture and Food Research* 15 (2024): 100976. <https://doi.org/10.1016/j.jafr.2024.100976>
- [14] Jiang, Huaxiong, Yuxiao Wang, Wei Ma, and Mengmeng Zhang. "Unlocking the nonlinear Nexus: Accessibility of emergency resource and resident participation in flood response." *Journal of Transport Geography* 118 (2024): 103926. <https://doi.org/10.1016/j.jtrangeo.2024.103926>
- [15] Kumar, Pankaj, Ram Avtar, Rajarshi Dasgupta, Brian Alan Johnson, Abhijit Mukherjee, Md Nasif Ahsan, Duc Cong Hiep Nguyen, Hong Quan Nguyen, Rajib Shaw, and Binaya Kumar Mishra. "Socio-hydrology: A key approach for adaptation to water scarcity and achieving human well-being in large riverine islands." *Progress in Disaster Science* 8 (2020): 100134. <https://doi.org/10.1016/j.pdisas.2020.100134>
- [16] Liebe, Rachel A., Kathleen J. Porter, Leah M. Adams, Valisa E. Hedrick, Elena L. Serrano, Natalie Cook, and Sarah A. Misyak. "'I'm Doing the Best that I Can': Mothers Lived Experience with Food Insecurity, Coping Strategies, and Mental Health Implications." *Current Developments in Nutrition* 8, no. 4 (2024): 102136. <https://doi.org/10.1016/j.cdnut.2024.102136>
- [17] Maharjan, Menuka, Santosh Ayer, Manashree Newa, Sachin Timilsina, Sudeep Thakuri, Bikram Manandhar, Bikram Singh, Moti L. Rijal, and Amir Sedhain. "Farmers' flood adaptation strategies in the Mohana–Khutiya and East Rapti River Basins in the Chure–Terai region of Nepal." *International Journal of Disaster Risk Reduction* 117 (2025): 105182. <https://doi.org/10.1016/j.ijdrr.2025.105182>
- [18] Malekpour, Shirin, Fjalar J. de Haan, and Rebekah R. Brown. "A methodology to enable exploratory thinking in strategic planning." *Technological Forecasting and Social Change* 105 (2016): 192-202. <https://doi.org/10.1016/j.techfore.2016.01.012>
- [19] Marengo, Jose A., Marcelo V. Galdos, Andrew Challinor, Ana Paula Cunha, Fabio R. Marin, Murilo dos Santos Vianna, Regina CS Alvala, Lincoln M. Alves, Osvaldo L. Moraes, and Fabiani Bender. "Drought in Northeast Brazil: A review of agricultural and policy adaptation options for food security." *Climate Resilience and Sustainability* 1, no. 1 (2022): e17. <https://doi.org/10.1002/cli2.17>
- [20] Marty, Clara, Samy Amghar, Andrés Barrera Patlan, and Alayne Adams. "The psychosocial impacts of slow onset climate change events among youth in LMICs: A rapid evidence review." *The Journal of Climate Change and Health* (2025): 100416. <https://doi.org/10.1016/j.joclim.2025.100416>
- [21] Mohamad, T., Tengku, A., Hazrin, M., Samad, S. A., & Padil, H. M. (2025). Coping Strategies and Community Resilience Among Flood Victims. *Asian Journal of Research in Education and Social Sciences*, 7(3), 1–12. <https://doi.org/10.55057/ajress.2025.7.3.8>
- [22] Ni, Minrui, Liang Xia, Xinru Wang, Yixuan Wei, Xiaofei Han, Yiqiao Liu, and Song Pan. "Psychological influences and



- implications for household disaster preparedness: a systematic review." *Frontiers in Public Health* 13 (2025): 1457406. <https://doi.org/10.3389/fpubh.2025.1457406>
- [23] Rojina Ahmed. (2024). Community Resilience to Urban Flooding: A case study of Shezidao, Taipei [Master's Thesis]. National Taiwan Normal University.
- [24] Sarkodie, Samuel Asumadu, and Phebe Asantewaa Owusu. "Bibliometric analysis of water–energy–food nexus: Sustainability assessment of renewable energy." *Current Opinion in Environmental Science & Health* 13 (2020): 29-34. <https://doi.org/10.1016/j.coesh.2019.10.008>
- [25] Tu, Jiachang, Andrea Reimuth, Nivedita Sairam, Heidi Kreibich, Antje Katzschner, Nigel K. Downes, and Matthias Garschagen. "Profiling households through a combined vulnerability and flood exposure index in Ho Chi Minh City, Vietnam." *International Journal of Disaster Risk Reduction* 115 (2024): 105016. <https://doi.org/10.1016/j.ijdrr.2024.105016>
- [26] Wani, Gowhar Farooq, Rayees Ahmed, Syed Towseef Ahmad, Amarjeet Singh, Ajinder Walia, Pervez Ahmed, Ashfaq Ahmad Shah, and Riyaz Ahmad Mir. "Local perspectives and motivations of people living in flood-prone areas of Srinagar city, India." *International Journal of Disaster Risk Reduction* 82 (2022): 103354.. <https://doi.org/10.1016/j.ijdrr.2022.103354>