

Three Keys to Succeed in the Battle of Typhoon In-Fa

UNNC VOICE

Ningbo has won the battle of protecting people's lives and their assets, Typhoon In-Fa leaves "zero casualties" so far with the government's tremendous efforts. This also demonstrates the success of public participation to improve flood resilience via good "preparation", and effective "responses" and "recovery" processes, said Dr. Faith Chan and his urban water research team with Dr. Dimple Thadani, Xinbing Gu, Yunfei Qi, Xiaohui Lu and Lei Li from University of Nottingham Ningbo China (UNNC).

Good 'Preparation'

Typhoon In-Fa has brought torrential downpours to Ningbo and the region (across Zhejiang and a few neighborhood provinces) and contributed to the enhancement of the combined effects of "rain", "tides" and "wind", according to the China Meteorological Administration.

The Ningbo Municipal Government takes this typhoon preparation works seriously and has announced cautioned alerts in city districts, especially in the high-risk areas, such as hilly and low-lying flood prone regions. The government has initiated a timely relocation service to remove communities from "high risk" areas such as hilly regions to safer places with temporary shelters with provision of basic needs, for example, cup noodles, hot water, bathing places, toilet, air conditioning, and even televisions, that the suffered victims and communities can stay in free-of-charge until the event is com-



UNNC urban water research team, authors of the article.
[Photo provided to Ningbo Times]

SPOTLIGHT

Fresh Seafood from the East China Sea is on the Market

By Gou Wen

At the beginning of August, a total of 1,493 fishing boats sailed off into the blue to catch shrimp, crabs, silver pomfret, and yellow croaker, among others, marking the end of the summer fishing moratorium. They account for 34.8% of the total number of fishing boats in the city, among which 1,173 are from Xiangshan and 206 from Ninghai.

In Ningbo, the first rush of buying was on the Ningbo Aquatic Products Wholesale Market. The catches are booked immediately by those buyers who

have waited here for a long time.

"During the moratorium, the market was empty after 6 PM," said Chen Tao. But now, he said, 13 truckloads of seafood, 25 tons in total, are delivered at this time, which will be sold out by about 9 PM.

Large yellow croaker, small yellow croaker, hairtail, swimming crab and other seafood that were originally banned from fishing during the sea-rest period began to be listed in large quantities.

Other categories will be available in the next few days and their prices are declining because of the increased quantity.

To give an example, the wholesale price of swimming crab, which is most favored by the public, has been reduced from 60 to 80 yuan per kilogram to 40 to 50 yuan. The merchants in the market said that the quality and yield of swimming crab this year have been improved compared with last year.

"In previous years, usually you had to wait for two to three days for the hub boats, which collect the seafood from smaller fishing boats on the sea, to return. This year, it took only one day, indicating that there was a lot of harvest," said Le Yajun,

Typhoon In-Fa, satellite image taken on 25 July 3 PM after making second landfall at Pinghu, Zhejiang Province.
[Source: Zhejiang Provincial Metrological Bureau]

pletely over.

According to the report from Ningbo Government, the city has relocated more than 421,000 people that included vulnerable communities such as elderly people that are living in the hilly Siming Mountain areas. That is the major key of guaranteeing "zero casualties" in this fierce typhoon event. The government also worked effectively to shut down major airports and transport hubs to ensure the public staying safe at home without any further risks that might oblige.

Smart Technologies Help on Effective 'Preparation' and 'Responses'

The Zhejiang Provincial Government recognizes the importance of using social media and technologies such as "Big Data" and "Smart Technologies" and the necessities for ensuring

good communication before, during, and after the typhoon.

The Ningbo government has worked tightly with the mobile companies to keep up good services of big data, artificial intelligence, and 5G services that proved by the good service of e-platform. Nowadays, the power of social media is importantly informing communities' essential real-time information such as disruptions of services caused by flooding and informing the public of high-risk areas.

Social media also helps to accelerate the responses from the emergency services. The 3D mapping services assisted the government agencies to provide corresponding services to the inundated communities in Ningbo (e.g., Dongqiao township), such as supporting the rescue routes and providing emergency services. The volunteering communities also urged the public to prepare the power bank just in case the power supply is collapsed during the typhoon period with floods, as they understood the importance of using mobile phone and smart technologies in the process of emergency responses and practices.

We have yet to finalize the function and effectiveness of social media in this event, but through the Weibo data, we have found there were over 2.45 billion times of chats in which people discussed about this typhoon event, raising the awareness and improving preparedness, which demonstrates that it is very

helpful for stakeholders and the public working together to reduce the impacts of this event.

Supportive, Helpful and Caring 'Recovery' Process

Climate change is adding more pressure on us to expect more frequent typhoons, intensive rainstorms, and storm surges, especially as such hazards are increasingly affecting coastal cities such as Ningbo, Hangzhou, Shanghai, etc., we all need to learn living with climate extremes and floods.

However, we can reduce the negative consequences especially financially via climate or flood insurance to ensure that the financial support is in place under emergency conditions. Lessons learnt by the typhoon Fitow occurred in October 2013 with the economic lost in Ningbo over 33 billion RMB, stressed on the fact that it is important to establish a systematic and adequate flood insurance program, which is essential to reduce the financial risk of households for their properties and personal assets.

The encouraging news is witnessed at this typhoon event. The insurers are improving their services through e-platform and technologies. For example, the compensation processes and procedures are updated to a quick and handy service, ensuring victims get financial assistance more effectively within 20 minutes.

The government is working

hard to ensure adequate support to the affected communities and improving a cared and speedy recovery processes, for example, enhancing public infrastructure, providing adequate food supply, water, and sanitation services, improving public perception and participation etc., to minimize the impacts and allow effective resuming of people's normal life.

Concluding Remarks: Moving towards 'Resilient Sponge Cities'

There are misunderstandings with the function of "Sponge Cities" and that the infrastructure is definitely not aiming for the climatic extremes like the Zhengzhou incident with extreme down pour at 203.15mm/1hr super intensive rainstorm.

But through the success of this "In-Fa" event, we suggest that the governments should consider injecting the approaches of "resilience" via the above success key approaches into the Sponge City Program and that will be a realistic direction in the light of facing climatic uncertainties as both cities are the selected "Sponge Cities".

The success of Ningbo Municipal Government, stakeholders, and communities are truly remarkable, and this champion story is worth sharing across all Chinese cities and extensively to Asian neighborhoods.

Authors:

Dr. Faith Chan (Associate Professor, Deputy Head of School of Geographical Sciences and Deputy Head of Natural Environmental Resources Research Group, Faculty of Science and Engineering, UNNC)

Dr. Dimple R. Thadani (Assistant Professor, Nottingham University Business School China, UNNC)

Mr. Xinbing Gu (Postgraduate Researcher on urban flood resilience and operational management, UNNC)

Mr. Yunfei Qi (Postgraduate Researcher on urban catchment management and flood management, UNNC)

Miss Xiaohui Lu (Postgraduate Researcher on urban flood resilience and road design, UNNC)

Miss Lei Li (Postgraduate Researcher on Nature-based Solutions, UNNC)

INFO&TIPS

Ningbo has the Lowest Average Commuting Time among the 'New First-tier' Cities

By Dong Na

Commuting, as an important part of urban life, is relevant to the well-being of residents and the livability of cities. Living in Ningbo, how long do you spend on commuting every day?

The data shows that the latest average one-way commute in Ningbo is 31 minutes, one minute shorter than last year, which is the shortest among China's "new first-tier" cities. The average commute is 6.6 kilometers.

For office workers, the hours spent in traffic jams are probably unpleasant; not to mention extreme commutes that take more than 60 minutes can greatly reduce life happiness.

The good news is that the situation is easing — in 2020, 12 percent of commuters in major cities in China spent more than 60 minutes commuting, down 1 percentage point from the previous year.

Ningbo's performance is similar. In 2020, only 6% of the commuting population in the central city of Ningbo experienced an extreme commute of more than 60 minutes, down 2 percentage points year-on-year. This proportion is only higher than Taiyuan, Hohhot and Nanning among 42 major cities in China.

The proportion of commuting within 45 minutes to the city center in Ningbo also increased, from 83 percent the year before to 86 percent last year, making it one of the six cities, along with Hangzhou, Nanjing, Xiamen, Hefei and Haikou, to see a year-on-year increase of more than 2 percentage points. This shows that most office workers in Ningbo need no more than 45 minutes from home to work.

At present, 61 percent of Ningbo's commuting population enjoys a "happy commute" distance of less than 5 kilometers in the central city. Within this range, people can flexibly choose how to arrive in their offices, such as walking, cycling, public transportation, and self-driving, while the time is relatively controllable. In view of that, commuting time has been included in an important index to measure the city's livability.

By now, the number of motor vehicles in Ningbo has exceeded 3 million, meaning that in every 1 in 3 residents is a private car owner. Apparently, in Ningbo, self-driving commuting is becoming more popular.

With the opening of Metro Line 4 and the first phase of Metro Line 5 this year, the metro coverage in Ningbo will be greatly improved, and citizens will have more choices to travel by public transport.

Chief Adviser: Zhou Fangzhou
Proofreader: Gou Wen



The bustling wholesale market. [Photo by Xu Neng]

owner of Yonghai Fresh Seafood. She also suggested that if consumers want to eat bigger and fatter swimming crab, they still need to wait until after August 4.

"So far, most boats are catching shrimp and crab. We still need to wait for one and a half

months for full-scale fishing," said Liu Qi, Office Director at Ningbo Aquatic Products Wholesale Market. At that time, the supply of all kinds of fresh seafood goods will be increased by nearly 10 times, and the price will become more attractive.

