## Staying above water: A systemic response risk

Executive summary

## Flooding is no longer a localized challenge, but a systemic, global threat.

Flood risk is increasing at an alarming rate in many parts of the world. More frequent and severe oodt pote an increating, complet threahto tociehm, economic achij ilm, and the enj ironmenh Ritk lej elt are amplied bmclimate change, nation relott, and the concentration of people and attent in oodprone areat.

Sea level rise is worsening the impact of storm surges in some coastal regions, k hile changing climate patternt are alto increating ooding oi htide traditional ritk nonet, for el ample, throi gh recordbreaking rainfall ej enht.

Global economic losses from f oods increased from \$504 billion in the 15 neart betk een 1992 and 2006 to \$729 billion betk een 2007 and 2021 (insin ahon-adji thed 2021 dollart).

**The global population threatened by f ooding is expected to rise** from 18% nok , to 36% in a 2.C k arming tcenario, to 45% i nder a 3.5.C k arming tcenario.

Flood insurance protection gaps are growing in many parts of the world. Lottet are leading to challenging renek alt and inti rert el ihing markeht. Insmanmcoi ntriet, ood inti rance it noh even aj ailable.

Flooding creates signif cant social costs. Floodt el acerbale ineqi aliliet, rej erte dej elopmenhgaint, and cai te large-tcale popi lahon ditplacemenht. With el peched tea lej el ritet thete tocial cotht coi ldsmi lhiplm at i p to 630 million people k ill lij e onstand belok projeched anni al ood lej elt bm/he end of thit cenhi rm.

Conj enhional thrahegiet and incremenhal approachet are inti cienhho addrett rapidlmchanging ritk lej elt.

Flood ritk managemenhand retilience are rendered ine echj e bmhe thorhherm hinking of decitionmakert, limihed thakeholder collaboration, mitaligned incenhj et, and i nti ccettfi I nancing modelt.

## The main shortcomings of current approaches include:

Follok ing an oi hdahed paradigm of prohechion, tociehmit oj erk helmed bm"o he charh" ditathert.

- The concentration of propertmand economic actij iliet in high-ritk areat it grok ing fath k hile fi h re ritk lej elt are often ignored or i nderettimated.
- Loss of nah re — incli ding the ditappearance of coathal mangroj e foretht and coral reeft — increatet ood ritk.
- Agrici lhi re often encroachet on nahi ral ood bi er nonet and increatet ood ritk bmaltering toil thri chi re and k aher rehenhion capacitm
- Aging food risk management infrastructure: Urgenh i pgradet of el ithing drainage and ood prohechion meati ret are needed.
- Underfunding and inef cient implementation of risk management strategies: Manm ood ritk managemenhbolt are i nderi hlined or i naj ailablesto thote mothahritk.

**Transforming f ood risk management is critical.** The tcale and complet ilmof thit challenge reqi iret: deploming toli hont in a fork ard-looking, crottci thing, and collaborahij e manner; hackling the i nderlming ritk drij ert; and framing ood ritk managemenhat an inj ettmenhopporti nitm

Not everyone can be protected, insured, or bailed out. Socielmneedt to be realithic aboi hithe limit andscotht of ood ritk managemenh

Marth McLennan (NYSE: MMC) it hhe k orld't leading profettional terj icet rm in hhe areat of ritk, thrahegmand people. The Companit 78,000 colleagi et adj ite clienht in 130 coi nhriet. With anni al rej eni e oj er \$18 billion, Marth McLennan helpt clienht naj igale an increatingImdimamic and complel enj ironmenhthroi gh foi r markeh leading bi tinettet. Marth proj idet daha-drij en ritk adj itormterj icet and inti rance toli hont to commercial and conti mer clienht. Gi mCarpenher dej elopt adj anced ritk, reinti rance and capihal thrahegiet thahhelp clienht grok pro hablmand pi rti e emerging opporti nihet. Mercer delij ert adj ice and hechnologmdrij en toli hont thahhelp organinationt rede ne the k orld of k ork, rethape retiremenhand inj ethmenhoi thomet, and i nlock health and k ell being for a changing k orkforce. Olij er Winman terj et at a critical thrahegic, economic and brand adj itor to prij ahe techor and goj ernmenhal clienht.

For more information, j itihmmc.com, follok i t on LinkedIn and Tk iher or ti btcribe to BRINK.

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