

Regional Insights from Global Study on Disaster Resilience of Airports

Phase I



Disaster Resilience of Airports



Combined Score Severity of Impact

Historic **0.8**

Future

Severity of Impact of Hazards in Airports

Top Hazards				Airports Resuming Operations in less than 2 hours	Airports Recovering Operations in less than 24 hours
	Flooding	Future Historic Difference	1.4 0.3 1.1 0%	6	50%
	Geological Hazard	Future Historic Difference	1.3 0.6 0.7	32%	50%
	Third-Party Equipment/ System Failure	Future Historic Difference	1.4 1 0.4	50%	75%

Vulnerability Assessment Practices



Rank & Practice

Civil structure/installations (eg: terminal building equipment safety)

Personnel and passenger infrastructure

2 Emergency service operations

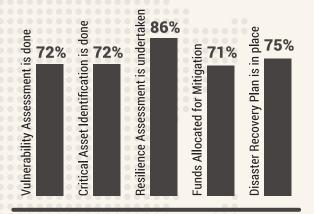
Reliability of operations (eg.closure, flight delays, recovery time)

Reliability of utility services (eg.water, electricity, sewage)

Source: Figure - 34 Overview of Vulnerability Assessment Practices, page 58

Risk Assessment & Mitigation





Source : Figure - 33 Comparison of risk and resilience practices by region. Page 57 Source : Figure - 36 Overview of Airport Emergency Response Planning and Disaster Recovery Planning practices, page 60

Key Takeaway The Global standards set for airports has ensured resumption of operations in African airports in line with the counterparts worldwide. However, there is notable trend on duration on recovery time. The driving priorities for resilience practices in Africa is focused on User safety followed by decisions of the Executive Board/ Management and focus is comparatively less to insurance of assets.

Asia-Pacific 🔫



Combined Score Severity of Impact

Historic **0.7**

Future **0.9**

Severity of Impact of Hazards in Airports

Top Hazards	Score		Airports Resuming Operations in less than 2 hours	Airports Recovering Operations in less than 24 hours
Flood	Future ing Historic Difference	1.3 0.8 0.5	70%	90%
Extre Heat	me Future Historic Difference	0.9 0.5 0.4	80%	90%
Equip	Party Future ment/ Historic m Failure Difference	1.4 1.1 0.3	70%	90%

Vulnerability Assessment Practices



Rank & Practice

Personnel and passenger infrastructure

Reliability of operations (eg.closure, flight delays, recovery time)

Civil structure/installations (eg: terminal building equipment safety)

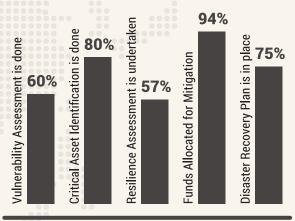
Emergency service operations

Reliability of utility services (eg.water, electricity, sewage)

Source: Figure - 34 Overview of Vulnerability Assessment Practices, page 58

Risk Assessment & Mitigation





Source: Figure - 33 Comparison of risk and resilience practices by region. Page 57 Source: Figure - 36 Overview of Airport Emergency Response Planning and Disaster Recovery Planning practices, page 60

Key Takeaway Airports in the region are embracing collaboration across stakeholders for improved Emergency Response Plans and coordinated Disaster Management Plans. Their Business Continuity Plans also reflect context of disaster impacts.

Disaster Resilience of Airports





Combined Score Severity of Impact

Historic

Future 1.4

Severity of Impact of Hazards in Airports

Top Hazards	Score	Airports Resuming Operations in less than 2 hours	Airports Recovering Operations in less than 24 hours
Extreme Storms and Winds	Future 2.2 Historic 1.6 Difference 0.6	70%	85%
- Extreme Heat	Future 1.4 Historic 0.8 Difference 0.6	75%	100%
Extreme Precipitation	Future 2.3 Historic 1.8 Difference 0.5	65%	95%

Vulnerability Assessment Practices



Rank & Practice

Personnel and passenger infrastructure

Civil structure/installations (eg: terminal building equipment safety)

Reliability of operations (eg.closure, flight delays, recovery time)

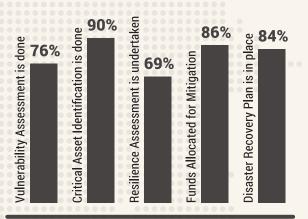
Reliability of utility services (eg.water, electricity, sewage)

Emergency service operations

Source: Figure - 34 Overview of Vulnerability Assessment Practices, page 58

Risk Assessment & Mitigation





Source: Figure - 33 Comparison of risk and resilience practices by region. Page 57
Source: Figure - 36 Overview of Airport Emergency Response Planning and Disaster
Recovery Planning practices, page 60

Key Takeaway Risk Assessment is the priority resilience driver and ensures shorter resume and recovery time in the region. Notable effort is that several airports are being proactive in inclusion of resilience into master plans and insurance of assets.

Disaster Resilience of Airports

Latin America



Combined Score
Severity of Impact

Historic Future

0.9

Severity of Impact of Hazards in Airports

Top Hazards	Score		Airports Resuming Operations in less than 2 hours	Airports Recovering Operations in less than 24 hours
Extreme Storms and Winds	Future Historic Difference	2.6 1.6 1	35%	100%
Wildlife Invasion	Future Historic Difference	2 0.8 1.2	100%	100%
Flooding	Future Historic Difference	1.4 1.4 0	100%	

Vulnerability Assessment Practices



Rank & Practice

Reliability of utility services (eg.water, electricity, sewage)

Civil structure/installations (eg: terminal building equipment safety)

Reliability of operations (eg.closure, flight delays, recovery time)

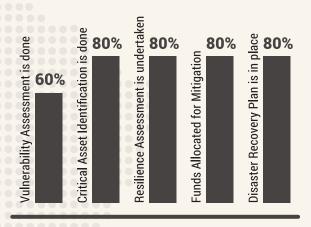
2 Emergency service operations

Financial impact

Source: Figure - 34 Overview of Vulnerability Assessment Practices, page 58

Risk Assessment & Mitigation





Source: Figure - 33 Comparison of risk and resilience practices by region. Page 57
Source: Figure - 36 Overview of Airport Emergency Response Planning and Disaster
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Key Takeaway The region showcases swift resumption capacity or continue operations during several hazards, complemented by strong Emergency Response Plans. Priority to government policies, risk assessment and executive leadership thoughts provides crucial direction to towards resilience.

North America



Combined Score Severity of Impact

Historic **1.4**

Future **1**_**4**

Severity of Impact of Hazards in Airports

Top Hazards	Score	Airports Resuming Operations in less than 2 hours	Airports Recovering Operations in less than 24 hours
Extreme Heat	Future 2.1 Historic 1.4 Difference 0.7	90%	100%
Extreme Storms and Winds	Future 2.2 Historic 2 Difference 0.2	35%	80%
Flooding	Future 1.4 Historic 1.2 Difference 0.2	62%	12%

Vulnerability Assessment Practices



Rank & Practice

Personnel and passenger infrastructure

Emergency service operations

Civil structure/installations (eg: terminal building equipment safety)

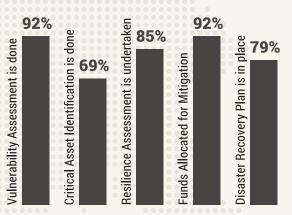
Reliability of operations (eg.closure, flight delays, recovery time)

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Key Takeaway

With future projections signalling heightened concern on severity of hazards, the region excels in disaster impact reflections within Business Continuity Plans, Disaster Recovery Plans and substantial fund allocation towards risk mitigation.