

Operational decision-making time	Hours and days	Minutes
Decision maker	A person who makes decisions on his own	A decision-maker based on AI
Types of management standards	Single, by individual functions	Digitals

However, the use of information technology in the management process does not mean that managers should abandon their traditional supports, primarily soft skills. New digital capabilities do not cancel the old management techniques, they expand the tools of the manager. According to the table, it should be noted that digital technologies help organizations expand their system and make a profit.

Conclusion

Thus, the use of digital technologies for the development of a quality management system will be accompanied by an increase in the quality and availability of products or services for consumers, which will lead to the expected increase in profits and competitiveness. Data management in the context of digitalization is an integral feature of modern management, it is caused by the objective need to respond to the needs of the organization.

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THE ECONOMIC DAMAGES CAUSED BY NATURAL DISASTERS TO DIFFERENT COUNTRIES OF THE WORLD

Siwakorn Vilaivong
 Supervisor E.A. Efimova
 Samara National Research University

Introduction. This article discusses about the categorization of disaster losses, and their economic impacts toward different countries in recent years, and recommendation of disaster risk reduction (DRR) technology in accordance to the future threat.

Characteristics of disaster damage and loss:

Natural disasters are earth natural processes which resulted in a large-scale unexpected and overwhelming event, famous example are earthquake, floods, wildfire, fire, and storm. Natural disasters often impose negative impact toward many aspects of society such as human life, material, environment, and economy. The term “damage” and “loss” are used regularly in this context, both terms are similar. Damage is a common term used to describe physical injuries to person or object. Losses are the results of being deprived of something. The major difference is losses are also a measurement unit, to convert casualties and assets into monetary terms. There are two types of losses, direct and indirect. Timing is what indicate differences between these two. Direct losses are immediate physical or structural impact from disaster, for example, property damages by earthquake. Indirect losses are what happened after disasters and usually link to inability to conduct business in hazardous area. In addition, direct and indirect losses can and cannot be quantifiable in some cases, for example, a historical monument was destroyed by storm, the total value of the monument can be calculated and considered as direct loss, but the social and environmental impact are difficult to convert into monetary terms, non-quantifiable losses like this are also known as intangible losses [1].

Economic impact of natural disasters:

According to Figure 1, over the decade, natural disasters are responsible for 170 billion US dollars of average losses every year, with exception of 2011 and 2017, where the losses skyrocketed above 300 billion. The reason behind massive losses in 2011 was Tohoku earthquake in Japan and flood in Thailand, in addition to direct losses, both countries are also major industrial hub, which created indirect losses from the disruption of global supply chains. The world faced devastating losses again in 2017, when United States and South Asia were hit by series of hurricane and tropical storm. Hurricane Maria disrupted medicine production in Puerto Rico, lack of medical supply affected every hospital across United States. Developing countries with high poverty in many parts of Asia such as India, Nepal, Bangladesh, and Sri Lanka were affected by cyclone and flood which further slowing their economic growth [1,2].

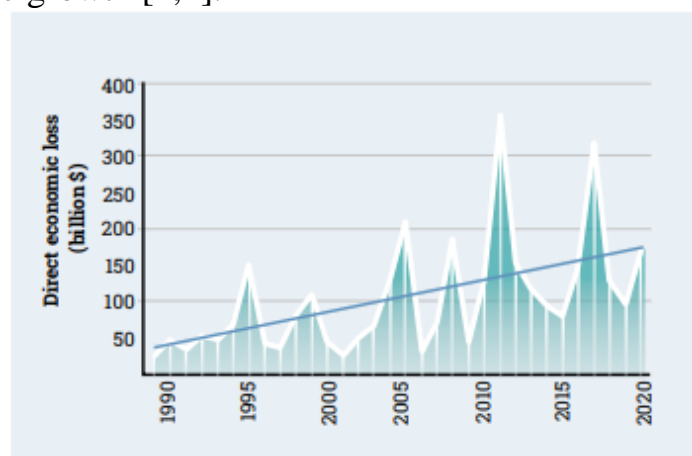


Figure 1 – Direct economic losses between 1989-2020[2]

Developed countries often suffers high losses. However, their losses are temporary because of effective disaster management and insurance. Impact is more

long-lasting in developing and underdeveloped countries, who does not have resources to handle natural disasters. Figure 2 showed that 40 percent of all disaster losses since 1980 were insured assets, but this percentages mainly came from developed countries with high income, as insurance are often unaffordable or unavailable for countries with low-value assets and incomes. Without insurance, government must rely on international support or allocate state budget to rebuild their lost economy and compensate victims, the latter put strains on poor countries [2].

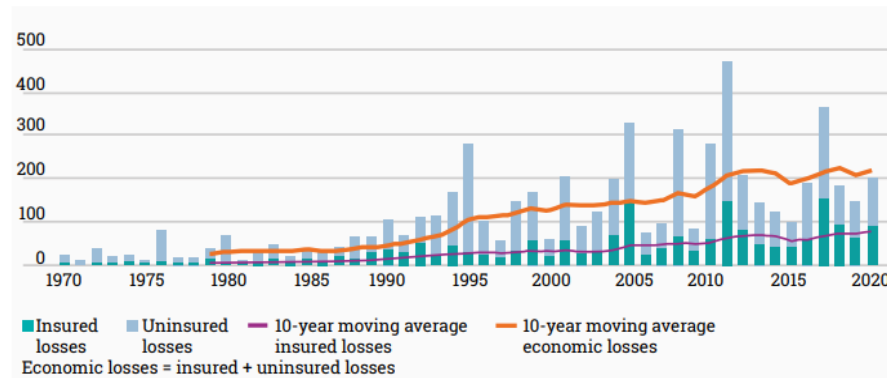


Figure 2 – Insured and uninsured losses between 1970-2020, in billion US dollars [2]

Lack of resource and capabilities to fight disaster threat make lower income countries sustain more economic losses. Over the past decade, Asia Pacific suffers 1.6 percent of average GDP losses while Africa suffers 0.6 percent, both regions largely consist of developing countries with high population and poverty rate (Figure 3) [2].

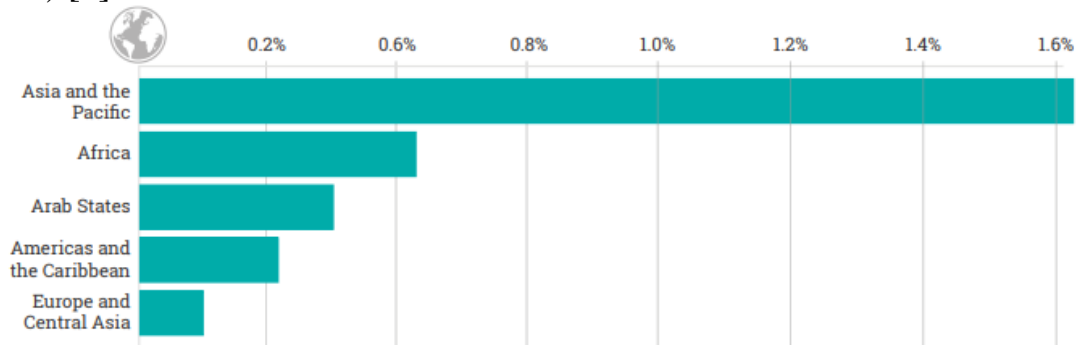


Figure 3 – Average regional economic loss from disaster as share of GDP between 2010-2020 [2]

In early 2022, Japan was hit again by earthquake, while not as powerful as Tohoku earthquake in 2011, it costed Japan 8.8 million US dollars. Asides earthquake in Japan, other significant natural disasters occurred are climate-related. United States dominated the overall losses with 86 million US dollars, due to its geographical location which exposes them to multiple destructive storms. Australia, China, and South Africa experienced massive floods which cost them total of 12.8 million US dollars of economic losses (Figure 4) [3].

Disaster	Months	Country	Econ. dam. ('000 US\$)
Earthquake	Mar	Japan	8,800,000
Flood	Feb-Mar	Australia	5,900,000
Flood	May	China	3,900,000
Storm	Apr	USA	3,200,000
Flood	Apr	South Africa	3,000,000
Storm	Mar	USA	3,000,000
Drought	Jan	USA	3,000,000
Storm	Apr	USA	2,200,000
Storm	Mar-Apr	USA	1,300,000
Storm	May	USA	1,300,000

Figure 4 – Top 10 disaster by economic damage in the first half of 2022 [3]

Future trend and DRR technologies recommendation:

According to Global Assessment Report 2022 (GAR 2022), the world faced around 350 to 500 disasters between 2001-2020, and if the trend continues, the number may increase to 560 per year by 2030. The UN Office for Disaster Risk Reduction (UNDRR) also highlighted that climate change and mismanagement are responsible for the increasing frequency [3]. Many DRR technology can be applied, but the most suitable device for climate related disasters is Early Warning System (EWS), a communication system designed to warn people about disaster threat, space technologies like satellites should be used in conjunction with EWS to monitor the formation of potential weather-related disaster risks, this will allow the authority to make well informed decision on the warning. This does not mean that non-climate disasters should be overlooked, earthquake still poses a serious threat in countries located on seismic lines. Therefore, EWS should be used with seismometers to help detect and measure earthquake.

Conclusion:

International community work together to fight natural disasters by developing risk reduction policy and technology, but disasters remain costly and widespread, especially in important manufacturing zone and developing countries which could harm global economy. Frequency of disasters will increase along climate change as well. Therefore, technologies to prevent as much losses as possible, both life and economy, are needed.

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ANALYSIS OF INTERNATIONAL ACTIVITIES OF THE RUSSIAN RAILWAYS HOLDING

Tobbal Bilel

Supervisor E.A. Blinova
Samara National Research University

Abstract

This paper under the title analysis of the international activities of the Russian Railways discuss the international pursuits of the Russian Railways in Europe, Asia, Africa, and Latin America. The article discusses the areas of the development of the foreign business in different spheres and mentioned the main achievement in 2020 by giving all details of the corporations that had been made and built and retailing the achievements of it, including some statistics of the improvement the transportations of the goods to different destinations. The article concludes by the future goals of the recent project until 2030, for making different upgrades by planning in the sphere of building new roads, growing the financial plan, and making new corporations with other companies.

Introduction

Russian Railways is a huge Russian company that does its business actively not only within Russia but also all around the world. That is why the author of this article decided to go deeper in research of this company's activities, Thus, the geography of the international activities of the Russian Railways holding covers the countries of Europe and Asia, Africa and Latin America. The main directions of the Company's international activities are transit cargo transportation and international logistics, as well as the implementation of infrastructure projects abroad. The key companies forming the foreign business of the RZD holding include RZD International LLC, CJSC South Caucasus Railway, UTLC ERA JSC, GEFCO, RZD Logistics JSC.

Key areas of development

JSC "Russian Railways" continues to develop foreign business, including by expanding the geography of its presence, as well as by promoting the export portfolio of the Holding, formed in the following areas:

- design, construction (reconstruction), electrification and subsequent operation of railways;