TOPICS

State of Damage and Recovery of Distribution and Industry in Port Cities Following the Great East Japan Earthquake

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The tsunami caused by last year's Great East Japan Earthquake claimed a terrible toll of human life and property, but also destroyed factories, offices and other commercial facilities, causing immense disruption to corporate production and distribution. But since damage to private companies and their recovery processes in such events essentially fall into the category of private activity, they are less likely to be recorded in the public domain compared to cases involving public infrastructure. This tends to be true even when corporate surveys and similar studies are conducted.

Therefore, based on publicly disclosed information in the form of newspaper articles (national, regional and specialist newspapers) and statistical data including trade statistics, we enumerated the damage suffered by companies in each port city and industrial sector and examined their recovery processes (focusing on manufacturing industries and power stations). Enumerating these data enables us to ascertain a number of matters, including (1) the relationship between ground conditions, inundation depth and other factors resulting from a company's geographical location and its damage and recovery process, and (2) the characteristics of damage and recovery processes in different sectors.

For example, on examining the relationship between the inundation depth of disaster-hit factories and the number of days needed for a complete recovery, the observed tendency was that a full recovery takes at least 100 days if the inundation depth is more than 2 meters. On the other hand, in some cases when the inundation depth was less than 2 meters, a recovery had been made one month after the disaster.

Repeating this kind of investigation should make it possible to use the enumerated results as basic data when discussing disaster prevention measures that reflect the impact on corporate activities in future. The details of this study are currently being prepared in the form of a NILIM Technical Note.