In the past decade, the world economy has experienced a number of natural disasters or episodes of economic crisis that have seriously disrupted international trade flows. The examples of three industrial clusters in the Indonesian region of Yogyakarta illustrate how stakeholders can manage to escape from production, distribution, market and business disruptions that follow the occurrence of natural disasters. The interaction between different stakeholders within a value chain turns out to be an important determinant of disaster management strategies. Aid for trade can play a useful role in disaster management, in particular in the post-disaster recovery phase.

The impact of disasters may disrupt the relations between the local economy and the global economy through which international trade acts as a medium. Depending on the scale, the impact of a disaster on international trade can be direct and indirect. The direct impact can be witnessed for example on the supply side when it affects exports. Disasters may destroy infrastructure that supports production-related facilities as well as physical connections to markets. An example of an indirect impact may be the decreasing capability of firms to settle their financial obligations. Firms may also suffer from the loss of future contracts or the loss of experienced staff.

Four phases of disaster management have been distinguished in the relevant literature: mitigation, preparedness, response and recovery. Although Aid for Trade has traditionally been delivered in ‘normal’ situations, i.e. situations that do not occur in the context of disasters, Aid for Trade has the potential to play a useful role in post-disaster recovery phases. In those phases, it is assumed that local communities have already developed some capabilities to normalize the functioning of social and economic institutions and to restore their sources of livelihoods. Interventions in this phase then influence the economic dimension of disasters as they contribute to normalizing and improving the economic situation by reshaping communities’ engagement in international markets.

In identifying the link between Aid for Trade and post-disaster recovery, it is worthy to consider the role of various actors in a disaster-affected value chain. Disaster-affected firms may, for instance, encounter difficulties in finding proper substitute suppliers or customers elsewhere, making the impact of the disaster last longer. Dependence on international distribution facilities has increased...
vulnerability to disaster as damage to these facilities can easily lead to supply chain disruption.

The Indonesian region of Yogyakarta was hit by a major earthquake in 2006. Three tourism-handicraft clusters are located in this region: Bobung, Krebet and Kasongan. The clusters are connected to international markets through tourism and through direct exports of handicraft. All three regional clusters were affected by the earthquake:

- In Bobung production was only mildly affected since there was no severe physical damage to relevant handicraft production sites. However, distribution and marketing was affected as suppliers and buyers stopped their business for several weeks;
- In Krebet, numerous handicraft production sides were entirely destroyed or damaged. Distribution and marketing activities were interrupted for a couple of months;
- Destruction was massive in Kasongan as the location was close to the earthquake’s epicenter. Economic activities only picked up after several months and it took business activities years to recover fully after the quake.

The path of recovery after a disaster like the 2006 earthquake will to a significant extent depend on the prevailing relationship between different stakeholders within the relevant cluster or value chain. Value chain analysis typically distinguishes four types of governance structures: arms-length market relations, modular structures, a captive relationship or a hierarchical relationship. The degree of explicit co-ordination and of power asymmetry is higher, the more hierarchical the role of the lead firm within the value chain. In a hierarchical value chain, therefore, the lead firm has a crucial role during the recovery phase. In an arms-length market structure, instead, the success of the recovery phase will to a large extent depend on whether and how buyers and suppliers succeed in coordinating a return to normality of the relevant community. The three clusters in the Yogyakarta region benefited from a number of community based aid-programs that facilitated recovery after the natural disaster hit. In Bobung, relevant programs focused on reestablishing market and distribution networks in support of business recovery. In Krebet, the focus was on normalizing commercial activities in terms of village tourism revitalization. Last but not least, relevant programs in Kasongan focused on developing community-based tourism, through cultural and art festivals, and through initiatives to link Kasongan with its wider creative industry or economic context in Yogyakarta.

The experience in the Yogyakarta region illustrates that schemes of community-based development programs in a post-disaster situation can help export-driven industrial clusters to recover from disruptions in production, distribution and marketing processes. It would be interesting to explore the possible role of the aid for trade initiative in these contexts.

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