Assessing the costs of resilient reinstatement of flood affected properties

The percentage additional cost for resilient reinstatement over traditional repair, ranged from 23 to 58 per cent with a mean of 34 per cent depending on the house type. Resilient repairs were more expensive than traditional methods, but were found to reduce the repair costs by as much as 73% assuming a subsequent flood were to take place.

Recently a focus of UK and European flood risk management policy has been towards promoting the uptake of property level flood adaptation measures. Despite this focus, the take-up of property level flood adaptation measures (both resilient and resistant measures) remains very low. One of the apparent barriers to uptake is the cost of installing such measures. This study investigates the cost of adopting resilient reinstatement measures by considering a small number of actual properties that were flooded in Cockermouth during a 2009 flood event. The research question is ‘what is the additional cost of resilient reinstatement compared to traditional reinstatement?’

Secondary data obtained from a loss adjusting company provides the basis for analysis. The data takes into consideration the cost benefit of resilient repair, assuming the same properties would be flooded again. The traditional reinstatement costs were established as the actual cost of putting the properties back in a like-for-like manner while resilient reinstatement costs were established by creating new resilient repair schedules based on recommended good practice.

The results show that the percentage additional cost for resilient reinstatement over traditional repair cost ranged from 23 to 58 per cent with a mean of 34 per cent depending on the house type. However, resilient flood mitigation measures seem most promising given repeat flooding, limiting the cost of repairs by as much as 73% for properties with a 20% annual chance of flooding. This indicates that the up-front investment would usually be recovered following a single subsequent flood event.

However, the financial benefit of adopting resilient reinstatement will often be reaped by insurance companies as they in most cases bear the cost of reinstatement. Further, by reducing the time taken to reinstate the property, adopting resilient repairs is likely to lead to other less tangible benefits arising from, for example, reduced stress and disruption to homeowners. It is recommended that insurance companies pro-actively attempt to incentivise homeowners that are living in floodplain areas to adopt resilient measures through for example reduced premiums and/or excesses.