

APPENDIX 1

This document contains the texts and the pictures used to inform the participants in the control group and the four experimental conditions.

Introduction (all participants)

Before presenting the questions, all the participants were introduced to the questionnaire.

The Netherlands is a water-rich country, where people have been living near major rivers (like the Rhine and Meuse) for a long time, both inside and outside the embanked area.

The participants in the control group were reminded of the purpose of the questionnaire as follows:

In this study, we are interested in your opinion about living in the river delta.

The participants in the four experimental conditions were introduced to one the four risk frames that was randomly assigned to them.

Frame 1 (living outside the dikes, climate change)

Many old harbor areas that are located outside the embanked area are no longer in use.

This is why local governments would like to redevelop these areas into new residential neighborhoods. In the future, these neighborhoods will remain unprotected by dikes.

Although these areas outside the embanked area are often elevated, future residents should take flooding into account, which potentially causes damage. In this study, we are interested in your opinion about living in such a neighborhood outside the dikes.

If you would live in such a neighborhood outside the dikes in the future, then it is important to know that you may experience floods. Especially the combined effect of large amounts of water in the rivers and a storm surge of seawater (during a Northwestern wind) may cause high water levels in the delta. This hazard has decreased because of the Maeslant (storm surge) Barrier, but has not been completely eliminated. During times of high water levels streets can be covered with water. Such high water levels occur on average once in 10 years.

Photos for frame 1 (presented without caption)



Floods are of all times and usually cause serious damage. Moreover, the climate is changing, which increases the amount of water in rivers and causes sea level rise. According to experts, the Netherlands is insufficiently protected against the consequences of climate change. As a result, the flood risks in neighborhoods outside the dikes may increase in the future.

In this study, we would like to know how you think about living in such a neighborhood outside the dikes. Imagine that you would live in such a neighborhood outside the dikes, close to the river.

Frame 2 (living outside the dikes, continuous flood control)

Many old harbor areas that are located outside the embanked area are no longer in use. This is why local governments would like to redevelop these areas into new residential neighborhoods. In the future, these neighborhoods will remain unprotected by dikes. Although these areas outside the embanked area are often elevated, future residents

should take flooding into account, which potentially causes damage. In this study, we are interested in your opinion about living in such a neighborhood outside the dikes. If you would live in such a neighborhood outside the dikes in the future, then it is important to know that you may experience floods. Especially the combined effect of large amounts of water in the rivers and a storm surge of seawater (during a Northwestern wind) may cause high water levels in the delta. This hazard has decreased because of the Maeslant (storm surge) Barrier, but has not been completely eliminated. During times of high water levels streets can be covered with water. Such high water levels occur on average once in 10 years.

Photos for frame 2 (presented without caption)



In the Netherlands we have already known for a very long time that water entails risks. The first dikes have been constructed more than 1000 years ago. Moreover, the government is continuously working on flood safety. Recently, a new Delta Committee

has advised how the Netherlands can be protected against the water, also in the far future (until the year 2100).

In this study, we would like to know how you think about living in such a neighborhood outside the dikes. Imagine that you would live in such a neighborhood outside the dikes, close to the river.

Frame 3 (living in a deep polder, climate change)

Local governments are always searching for locations to build new neighborhoods. As a result, it becomes more and more common to build houses in deep polders, near the river dikes. A depth of 5 or 6 meters below the water level of a river is not uncommon.

Although these polders are protected by dikes, there is no guarantee that flooding will not occur. In this study, we are interested in your opinion about living in such a deep polder.

If you would live in such a deep polder in the future, then it is important to know that you may experience floods. Especially the combined effect of large amounts of water in the rivers and a storm surge of seawater (during a Northwestern wind) may cause high water levels in the delta. This hazard has decreased because of the Maeslant (storm surge) Barrier, but has not been completely eliminated. Dikes can breach if water levels in the river are very high. Such high water levels occur on average once in 2000 years. But, a dangerous situation can also arise if water levels are lower. That is because not all dikes are exactly equally strong. Even though the probability is low, the water level in the polder after a dike breach can rise up to 2 to 3 meters high.

Photos for frame 3 (presented without caption)



Floods are of all times and usually cause serious damage. Moreover, the climate is changing, which increases the amount of water in rivers and causes sea level rise. According to experts, the Netherlands is insufficiently protected against the consequences of climate change. As a result, the flood risks in deep polders may increase in the future. In this study, we would like to know how you think about living in such a deep polder. Imagine that you would live in a deep polder, close to the river.

Frame 4 (living in a deep polder, continuous flood control)

Local governments are always searching for locations to build new neighborhoods. As a result, it becomes more and more common to build houses in deep polders, near the river dikes. A depth of 5 or 6 meters below the water level of a river is not uncommon.

Although these polders are protected by dikes, there is no guarantee that flooding will not occur. In this study, we are interested in your opinion about living in such a deep polder.

If you would live in such a deep polder in the future, then it is important to know that you may experience floods. Especially the combined effect of large amounts of water in the rivers and a storm surge of seawater (during a Northwestern wind) may cause high water levels in the delta. This hazard has decreased because of the Maeslant (storm surge) Barrier, but has not been completely eliminated. Dikes can breach if water levels in the river are very high. Such high water levels occur on average once in 2000 years. But, a dangerous situation can also arise if water levels are lower. That is because not all dikes are exactly equally strong. Even though the probability is low, the water level in the polder after a dike breach can rise up to 2 to 3 meters high.

Photos for frame 4 (presented without caption)



In the Netherlands we have already known for a very long time that water entails risks. The first dikes have been constructed more than 1000 years ago. Moreover, the government is continuously working on flood safety. Recently, a new Delta Committee has advised how the Netherlands can be protected against the water, also in the far future (until the year 2100).

In this study, we would like to know how you think about living in such a deep polder.

Imagine that you would live in a deep polder, close to the river.