

# Climate change abroad – risks for Switzerland

Risk and opportunities – insights from the study



Schweizerische Eidgenossenschaft  
Confédération suisse  
Confederazione Svizzera  
Confederaziun svizra

Swiss Confederation

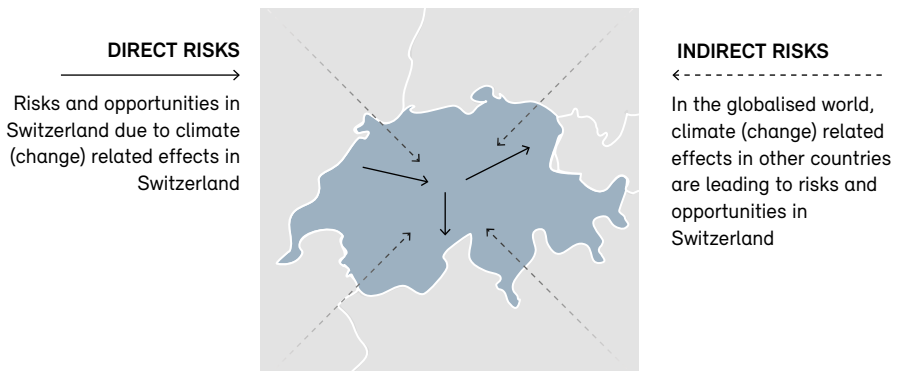
**Federal Office for the Environment FOEN**

# Impact from climate change in other countries

To date, the Confederation has focused its strategy to adapt to climate change and its analyses of the risks and opportunities of climate change on the direct, immediate effects of climate change on Switzerland. However, Switzerland, with well-developed international connections, is also affected to a considerable extent by indirect changes in the climate which take effect via other countries as well as by their consequences. Switzerland is connected to a very wide variety of world nations and their players, whether through trade relations, direct investments, tourism, foreign policy, migration or development cooperation. The consequences of climate-related events abroad may therefore proliferate across different areas of influence and long chains of cause and effect. The link between the cause in a foreign country and the effects in Switzerland will not necessarily be recognisable in every case, but may still exist.

## Direct and indirect risks

Switzerland is not only affected by direct risks of climate change, but also by indirect risks.



# Exposure to climate change in other countries

Climate change in other countries affects both Switzerland's economic areas of influence and the import and export of goods and services, as well as politico-social relations, which manifest themselves in the areas of security, migration and development cooperation.



## **Financial services**

Switzerland as a financial centre is the global leader in the management of private assets from domestic and foreign sources. Switzerland is also home to one of the ten largest insurance markets in Europe. If the consequences of climate change have an impact on the financial sector, this could damage wealthy bank customers (from abroad), but also threaten Swiss investments abroad and lead to major risks in the insurance industry.



## **Food supply**

Switzerland's level of self-sufficiency, including imported animal feed, has been between 50% and 59% in recent years (1995-2014). The majority of product imports come from the EU, but agricultural goods and important upstream products such as cocoa or coffee beans come from areas that are vulnerable to climate change. Market concentrations such as soya from Brazil also heighten climate-related risks.



## **Energy supply**

Switzerland is around 75% dependent on imports. Some of the imported energy sources come from countries which are vulnerable to climate change. Climate change in foreign countries can have a relevant impact on mines, refineries and transport routes for fossil fuels, and also on power networks and electricity production from renewable energies. This could lead to adverse effects on fossil fuels and the electricity supply in Switzerland.



### **Security**

Climate change can increase risks to human safety and of violent conflicts abroad. Switzerland's current security policy report states that the fragility of states has increased in recent years as a result of climate change. Countries in which Switzerland is engaged, for example, because of business activities or political interests, are also affected.



### **Development cooperation**

The focus of Switzerland's development cooperation is often on people in rural areas with a high dependence on natural resources. Climate change has a major impact on the livelihoods of development cooperation target groups in many places and can pose a threat to the progress achieved.



### **Economic output**

As a result of international networking, the impact of climate change abroad may affect Switzerland through the import and export of goods and services. In the procurement country, there could be changes in and impairments of production conditions, in the sales country an impairment of economic development and a changed demand structure. Particular risks occur where companies have a high share of exports to vulnerable countries or a high dependency on goods from climate-sensitive regions.

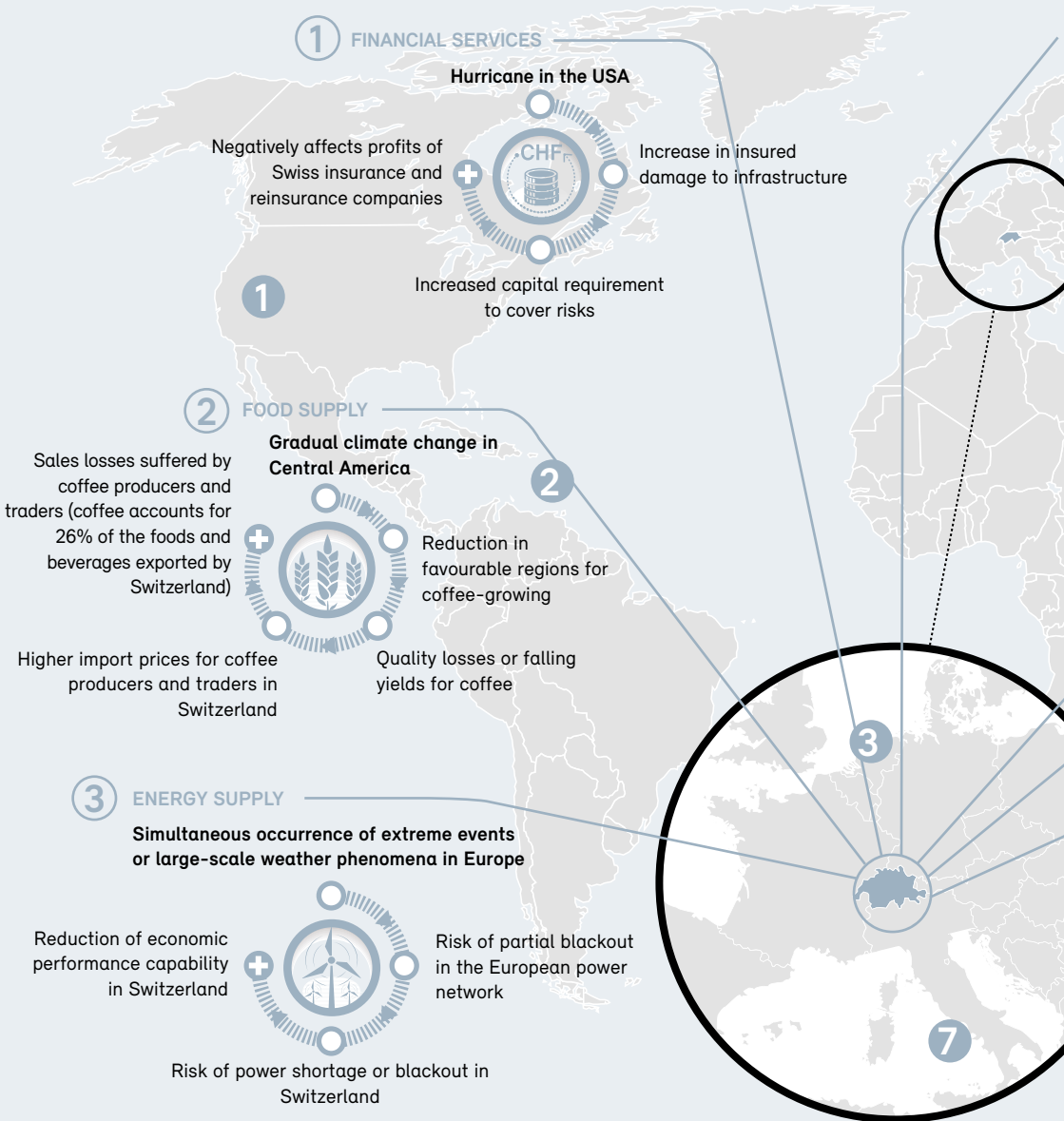


### **Migration**

Climate change is one of many factors that influence migration. Switzerland is not a primary destination for 'climate-influenced' migration, since as a rule such migration takes place over shorter distances. For those fleeing from vulnerable countries and people faced with poor economic prospects, however, Switzerland does represent a possible target.

# Effects of climate change abroad

## Examples of risks and opportunities for Switzerland



## 4 SECURITY

**Gradual climate change in the Horn of Africa/North Africa (less water and fertile soil)**

Diplomatic support, development cooperation by Switzerland needed in fragile states



Livelihoods threatened, falling income, high food prices

Social unrest, increased risk of conflicts

## 5 DEVELOPMENT COOPERATION

**Climate-related extreme events in Bangladesh (floods, salination of soil)**

Rising need for humanitarian aid and development cooperation with focus on climate



Threat to livelihoods of already vulnerable groups

4

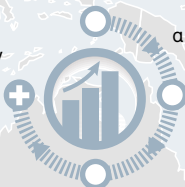
## 6 ECONOMIC OUTPUT

**a.) Floods in Thailand**

**b.) Increase in heavy rainfall in Southeast Asia**

a.) Lost sales in electronics industry

b.) Export opportunities for Swiss companies in the area of water technology/water treatment



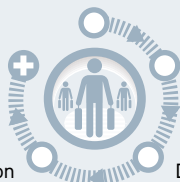
a.) Breakdowns in production and consequently in deliveries for PC hard drives

a.) Price of hard drives doubles  
b.) Increased need for (industrial) wastewater treatment

## 7 MIGRATION

**Gradual climate change in southern Europe (drought)**

More labour migration, effects on Swiss employment market



Agriculture adversely affected

Decision on permanent migration to Central/Northern Europe

Deteriorating living conditions for people working in agriculture

# Handling risks and opportunities of climate change abroad

**Financial services:** Climate risks are already considered in some investment analyses today. This practice may be expanded further. For insurance companies, climate change is taken into account as part of the core business.

**Food supply:** Climate risks can be integrated into sourcing processes. In some cases, it is possible to diversify upstream inputs. There are few opportunities to influence seed, fertilisers and pesticides where markets are highly concentrated.

**Energy supply:** In the case of fossil fuels, there are compulsory crude oil reserves. Several natural gas pipelines and connections to European natural gas storage facilities spread the risk. The high cross border capacity in electricity can cushion climate-related interruptions.

**Security:** Switzerland can reduce the risk to human safety in relevant countries through development cooperation, humanitarian aid and diplomacy.

**Development cooperation:** Switzerland is already deeply engaged in climate protection and climate adaptation projects and has integrated climate change as a cross-disciplinary topic.

**Economic performance:** Private industry can help to strengthen resilience by diversifying supply chains and sales markets and collaboration with suppliers. In addition, climate risks must be integrated more systematically into management and into investment decisions.

**Migration:** Supporting the resilience of people in their original countries and supporting countries of origin and transit and destination countries is crucial. Swiss labour market policy is central to labour migration caused by climate change.

This is a summary of the *Auswirkungen des Klimawandels im Ausland – Risiken und Chancen für die Schweiz* (Climate change abroad – risks and opportunities for Switzerland), commissioned by the Federal Office for the Environment, the literature is listed in the study report.

## To the summary

[www.bafu.admin.ch/ui-2002-e](http://www.bafu.admin.ch/ui-2002-e)



## Publisher

Federal Office for the Environment (FOEN)  
The FOEN is an office of the Federal Department of Environment, Transport, Energy and Communications (DETEC).

## Cover picture

Ship owner Juarez Conceicao looks on as soya bran is loaded onto a grain ship in the port of Paranagua in Paranagua, Brazil on Wednesday, 24 March 2004.

© KEYSTONE/AP Photo/Dado Galdieri

## To the Infras study: [www.infras.ch/](http://www.infras.ch/)

*transnational-climate-impacts-switzerland*  
(only available in German)



## Link to PDF file

[www.bafu.admin.ch/ui-2002-e](http://www.bafu.admin.ch/ui-2002-e)

Printed using a carbon-neutral process on recycled paper with a low-VOC content.

This flyer is also available in German and French.

© FOEN 2020