SUMMARY NOTE

FRENCH REPUBLIC

CLIMATE: TOWARDS GEOPOLITICAL DISRUPTION ?

Committee on Foreign Affairs, Defence and Armed Forces

Information Report No. 14 (2015-2016) by
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In anticipation of COP21, the working group has a mission to assess the geopolitical consequences of the climate, through the impact of rising sea levels on the one hand, on the Arctic region on the other hand.

I. Rising sea levels : a factor for geopolitical disruption

I. An inevitable phenomenon

The fifth Intergovernmental panel on climate change (IPCC) report (2013-2014) estimates that **temperatures may rise by 5°C[1] by 2100** and confirms the influence of man on climate.

Average sea levels **may rise by 82 cm** as a result of the oceans' thermal expansion and melting glaciers (mountains, Greenland, Antarctica).

The IPCC most pessimistic forecasts should be considered as realistic assumptions. Each new report only adds up to worrisome previous findings. The latest report might already be partly outdated. This **enduring phenomenon will unfold over several centuries** due to its inertia. **These forecasts constitute an average calculation. Hence a precautionary approach requires to take into account the entire range of assessments, as well as climate events such as tides, swell**s and the likely increase in frequency and intensity of storms and hurricanes.

II. Impacts and risks

Besides the risk of temporary or permanent flooding, especially in vulnerable areas : low-lying coasts, deltas and coral islands-, coastal erosion, salinization of aquifers, damage to coastal ecosystems and to infrastructures should also be taken into account.

Such factors may combine to increase the vulnerability of territories and populations, especially in subtropical areas ranging from South Asia, the Pacific, the Caribbean and Central America to the Southeastern US coast, but also in the Mediterranean region.

The scenario is corroborated by the fact that populations and activities are more concentrated in coastal areas. In 2035, 75 % of the population (6.5 billion) will be living within the coastal area (150 km from coasts).

Damages to persons and property

With sea levels rising by up to 40 cm by 2080, 93 million people may be affected by flooding every year, even with set up protections.

According to an OECD commissioned study on the 136 largest coastal cities, **damage costs may amount to 63 billion dollars a year by 2050. Without any adaptation measures, they could reach 1 trillion.** Cities that are densely populated, rapidly growing, poor, exposed to tropical storms or subsidence (deltas) are the most vulnerable. The study estimates that expenditures required to protect such cities may amount to 50 billion per year.

The analysis emphasises **the greater vulnerability of poor countries and their poorest populations.**

Population displacement

Emigration has always been a survival strategy to escape desperate situations. Major displacements will mostly be internal, but depending whether a swift return to living areas is possible or whether States can ensure an acceptable quality of life, **they may turn into international migration.**

[1] *Average temperature increase on the Earth's surface for 2081-2100 compared to 1986-2005, in the worst case scenario.*

OCTOBER 12TH 2015

According to the IPCC, **a 50 cm rise in sea levels may displace 72 million people. The whole of environmentally displaced people may amount to 200 million by 2050 according to the IOM** (250 according to UNHCR).

Risks of instability and conflict

Climate change will put our economic, social and political systems under pressure. It is **"the ultimate threat multiplier**". Where governments are unable to appease such tensions or cushion shocks, instability will increase.

Developing countries may become more dependent on imports for food security. Disasters may have serious consequences in terms of supply and disorganisation for developed economies. Stable States may become vulnerable should the pressure prove too strong or shocks too important to be resolved peacefully. Finally, the sense of injustice will increase between Northern countries and Southern victims.

Even though the climatic factor is only one of several risk factors, the increased risk of conflict cannot be excluded.

There are also reasons for hope: the fight against climate change and its consequences constitute opportunities for international cooperation.

III. Can the risks be decreased or mitigated?

The risks can be reduced if ambitious decisions are made on reducing greenhouse gas emissions. This is the COP21 challenge. **Its goals are a mere minimum, and their effective implementation will have to be carefully monitored.**

Population protection measures will have to be implemented in terms of infrastructure - avoiding maladaptations-, crisis management mechanisms and prevention policies, including relocation if necessary.

Many countries will not have the necessary capacity, and will have to benefit from technology transfers and international aid.

The international community will not be able to dismiss the issue of displacement for very long. It would therefore be in its interest to **anticipate such a risk** in order to limit those events by developing resilience, acting as early and as close as possible to crises in order to rescue, restore services and rebuild, to help primarily towards resettlement in the country of origin. Should this be impossible, the international community could organise temporary settlement in neighbouring or other countries by implementing fair distribution mechanisms between States and guaranteeing the safety and dignity of the displaced populations.

IV. Contributions and proposals

Support mitigation

- Set a goal for **national or international donors to suppress export and development aid for projects linked to carbon products and to shift to new energy sources, energy efficiency** and **projects likely to increase the resilience of territories and populations.**
- **At European level, support mitigation policies** through standardisation, control and fraud prevention, but also incentivise and develop research, innovation and an economic sector based on these technologies.

Support adaptation

- **Set up appropriate international or regional structures to allow for intervention and population assistance but also for long-term crisis management.**
- **Strengthen European cooperation in civil security.**
- Support research and innovation, and provide the means for an economic sector in the fields of prevention, crisis management and reconstruction.
- In France, strengthen prevention policies, research and training in innovative technologies for coastal protection as well as international expertise in these fields.

Anticipate population displacements

- Promote a **system to prevent and regulate displacements based on increasing resilience, relief and reconstruction as well as a fair distribution mechanism.** At European level, plan and prepare to contribute to the efforts of the international community.

Defence

- Regarding the European Union and NATO, develop reflection on the consequences of climate change on security and defence
- **At national level, address the issue in depth within the work of the forthcoming White Paper on defence and national security.**
- Analyse how vulnerable defence facilities and vital operators may be and reflect on distributing powers and resources between various forces (civil security, internal security and armed forces) in response to disaster risk in mainland and overseas France, as well as abroad, including the use of reserves.

II. Geopolitics and the Arctic, a forerunner of climate change

I. Disruption in the Arctic – a global issue

Climate disruption in the Arctic

- Since 1875, the temperature of the Arctic has risen about **twice as fast** as the global average. On Svalbard, visited by mission reporters, environmental changes are substantial, due to glaciers and sea ice retreating significantly, which threatens the entire ecosystem of the region.
- The **melting glaciers** of Greenland alone may amount to an average sea level rise of 7 meters over several centuries.
- **Disappearing sea ice**, although not causing sea levels to rise, contributes even further to global warming by decreasing the reflection of solar energy on white surfaces, which are replaced by dark ones. It is actually likely that, by 2050, the Arctic Ocean will be ice-free in late summer, for the first time in 125,000 years.
- **Melting permafrost**, currently 25% of the land surface in the Northern hemisphere, may have dramatic effects by releasing in the atmosphere large amounts of carbon, up to 1.7 trillion tonnes, while the +2°C goal requires that the cumulative global emissions should not exceed a range of 1 to 1.5 trillion tonnes of carbon by 2100. The snowballing effect caused by melting permafrost is not accurately taken into account by climate models.

A periphery or a new frontier?

- The Arctic warming may **open the "roads of the North"**, allowing new passages between Europe, America and Asia, reducing journeys by about 7,000 km

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- **The expansion of arable land** may interest countries lacking farmland (China).
- **Fishing**, as well as **hydrocarbon exploration and exploitation**, may become more attractive. The Arctic may contain 22% of oil and gas reserves yet to be discovered. However, significant obstacles do remain. Shell recently relinquished a license granted by the offshore US Government off Alaska. Extraction costs remain very high, at over $100 a barrel. However, due to changing economic, technological and climate conditions, companies may in the future be encouraged to engage in Arctic projects, while **their safety for humans and the environment is very uncertain**.

II. The Arctic – tensions and dialogue

National areas – international issues

Global warming has generated a renewed global interest in the Arctic, which might jeopardise the existing geopolitical balance in the area.

- Unlike Antarctica, the Arctic is not governed by a specific international treaty, with the exception of Svalbard (Norway). The **status of northern maritime passages** is disputed. Disagreements remain over **the boundaries of continental shelves**.
- Several major powers coexist in the Arctic. As a consequence, this area bears the brunt of the international context. **Tensions may arise with Russia**, the Arctic being a cause or pretext for those. Russia claims ownership on a large part of the Arctic and is implementing a major program to develop the Arctic territory, such as setting up military bases, building facilities including icebreakers, and exploiting hydrocarbon deposits.
- Furthermore, **Asian countries have an obvious interest in the Arctic**. In 2013, China, Japan and India in particular were admitted as observers to the Arctic Council. China especially has a genuine strategy for the region, consistent with its investment policy on every continent, and its willingness to be involved in all major international issues. Chinese polar research is very active, and China, which already has an icebreaker, is planning to build a second one.

- **The independence of Greenland** is probably an underestimated issue. The territory's location and wealth are strategic. Greenland withdrew from the European Union in 1985 and should it leave Denmark, may further turn its back on Europe to vest its interest into America and Asia.

- In such a context, **France and the European Union must state their Arctic policies very clearly.** For the EU especially, of which 10 States are members or observers to the Arctic Council, it is a major challenge for cohesion.

A flexible regional governance

- In this context of global challenges, the governing body that is the **Arctic Council** has a limited role. Created in 1996, the Arctic Council is a forum of eight neighbouring countries that focus on two priorities: protecting the environment and indigenous peoples. Unlike Asian countries, **the EU has not been admitted as a permanent observer**, due to a dispute on seal products trade and despite its three Arctic countries and its significant contribution to Polar research and Northern Development.
- The Arctic Council has led to progress. It strongly supported negotiations with the International Maritime Organization (IMO), in order to define a **Polar Code for shipping**. It led to the signing of two treaties, one on the **coordination of responsibilities for search and rescue** (2011), and one on **pollution control measures in case of oil spill** (2013). However, **military aspects are never addressed** as part of the Arctic Council.

III. Guidelines for the Arctic

- **Fully involve the Arctic in the COP 21 challenges,** affirming the will of the international community to preserve this region and consolidate its legal status, which will probably have to be based on various sectoral instruments, in the absence of a single treaty such as the one regulating the Antarctic. COP 21 should help **make the French goals for the Arctic heard, since they should be urgently and clearly stated.**
- Encourage the **settlement of disputes under the rules of the international law of the sea**, achieve **international regulation of fishing** in the central Arctic Ocean and strive for a ban on **the exploitation of Arctic hydrocarbon resources** as well as on the transport of certain hazardous materials.
- **Relaunch the French polar scientific effort** by strengthening the "French Arctic Initiative" ("Le Chantier arctique").
- **In the forthcoming White Paper,** analyse **French economic and strategic interests** in the Arctic. Maintain and develop relevant **sea and air action capacities** in the area, as part of cooperation with countries in the region.

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Online document: http: //www.senat.fr/notice-rapport/2015/r15-014-notice.html

		
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