

5. THE XYNTHIA STORM IN FRANCE

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INTRODUCTION

The Xynthia storm originated in Portugal on February 26, 2010. It crossed much of Western Europe before dissipating on March 2 in Scandinavia. On the night of February 27-28, it struck the west coast of France, where it caused significant human and economic damage. At least 53 people were killed in France, 29 of them in a single town, La Faute-sur-Mer, located in the Vendée Region. 79 people were injured, and about 500,000 were affected. Damage costs were estimated at 2.5 billion euros (Anziani, 2010).

This case study highlights the ongoing struggle against natural disasters, even in wealthy countries such as France. After explaining the reasons that led to this catastrophe, this article deals with the reaction of the government and the strong protests it triggered among the population touched by the storm. In order to avoid such a catastrophe happening again, and to anticipate likely seaward threats posed by climate change, the government tried to displace people living in the most dangerous areas and launched plans to establish stricter planning and development rules geared at preventing disasters and protecting populations. This case study evaluates the positions and the arguments of both government actors, and those in the affected region. It also sheds light on the ongoing debates about adaptation to climate change.

1. WHEN NATURAL AND HUMAN FACTORS MEET

Described as the most violent storm to hit France in over a decade, Xynthia was potent because of a combination of storm surge and high winds.

Dikes were breached in some places, causing severe flooding. The departments most severely hit were Vendée (35 dead) and Charente-Maritime (12 dead). In Vendée, two towns were particularly hit, L'Aiguillon-sur-Mer and La Faute-sur-Mer.

1.1. The pressure for development along the coastline

Though Xynthia was a natural event of an exceptional strength, its human impacts were due to social factors. In recent past, the region has undergone significant development, as former marshes were drained, protected with dikes, and used for agriculture (Ecalte, 2011:30). In recent years, the land has again been converted, this time for mass tourism. Indeed, Vendée has become a very attractive destination, thanks to its beautiful landscapes and beaches. For example, the small town of La Faute-sur-Mer has only 1,000 permanent inhabitants, but welcomes about 40,000 tourists in the summer. L'Aiguillon-sur-Mer, located next to La Faute-sur-Mer, welcomes 10,000 to 15,000 tourists in the summer, while its winter population is only 2,300 (Ecalte, 2011:48). In 2006, 45% of the houses in L'Aiguillon-sur-Mer and 86% of the houses in La Faute-sur-Mer were holiday homes¹⁵.

Tourism, and the significant wealth it attracts, has created strong pressure to develop land, in spite of potential natural hazards. In the case of Xynthia, all of the fatalities in La Faute-sur-Mer were in houses built in the last 30 years: 14 of them lived in houses built between 1980 and 1990, four in houses built between 1990 and 2000, and 11 in

15. See Cities data at <http://www.lafautesurmer.net/carte-didentitee/> and http://www.cartesfrance.fr/carte-france-ville/85001_L'Aiguillon-sur-Mer.html.

houses built between 2000 and 2010 (Vinet, Defosse & Leclere, 2011). Much of the damage occurred in areas supposedly “protected” by the dikes. However, these structures were built for agriculture, not homes: among the 9,000 km of dikes in France, it is estimated that 1,350 km were meant for agricultural land but are currently being used to protect residential areas (*Presse Ocean*, 2010a). For example, in La Faute-sur-Mer, the Côte de Lumière camping area was located in a hazardous low-elevation zone, and was completely destroyed during the storm. Only the fact that the camp was closed for the winter prevented mass fatalities.

1.2. A predictable (and predicted) catastrophe

The story of the Côte de Lumière Campsite illustrates perfectly how development in the Vendée region took place in a highly unplanned manner. The site was considered to be dangerous, and the camping facilities were built illegally. The government attempted to close it but was opposed by the mayor of La Faute-sur-Mer, René Marratier. In 2002, he organized a protest gathering of 1,000 people. Their main argument was that the campsite was essential for the town’s economy. Because local authorities had a vested interest in developing tourist infrastructure, they were reluctant to impede development. Thus, the government failed in its preventive efforts.

In La Faute-sur-Mer, a disaster prevention plan had been in development for nearly ten years, and still had not been formally adopted at the time of the storm. In 2001, the French government had asked La Faute-sur-Mer, and a few other coastal towns, to adopt disaster prevention plans. The mayor did not respond, and in 2007, a prefect attempted to force adoption of his own plan. Though it was not very strict, the prefect’s plan still triggered strong opposition. In November 2009, three months before Xynthia, the town council of La Faute-sur-Mer again postponed adoption of the disaster prevention plan, arguing that there had been « no constructive dialogue » with the state (Ecalte, 2011:62). Similar scenes played out in other coastal towns, where disaster prevention was viewed as a drag on economic development.

After Xynthia, it was now clear that such a lax attitude was a mistake. Indeed, the risks were known: in La Faute-sur-Mer, studies pointing to the risk of flooding were made public in 2007 (*Info ExpoProtection*, 2010), and a report from the local public works administration was made public in 2008. This report states, « The conjunction of two phenomena, a rise in the water level of the Lay Estuary [separating L’Aiguillon-sur-Mer and

La Faute-sur-Mer] and a rise in sea level, could have a very strong impact on densely developed areas behind an aging set of dikes » (Raison, 2008:287).

Who is responsible for these errors? The French Senate asserted that responsibilities were shared, since both local and national authorities could refuse to issue construction permits (Anziani, 2010:26). Soon after the storm, an association was created to defend the victims of the storm in La Faute-sur-Mer and the surroundings, the Avif (in French: Association pour la défense des victimes de La Faute-sur-Mer et des environs) The association filed a sealed complain against persons unknown to the public at the time of this article’s publication. Three local authorities from La Faute-sur-Mer (including the mayor, René Marratier) and a state civil servant have so far been put under investigation for “involuntary homicide”, and “endangerment”¹⁶. Legally, the main objective of the investigation is to determine who was responsible for the issuance of construction permits for two housing developments in La Faute-sur-Mer, “Les Doris” and “Les Voiliers.”

After Xynthia, the consensus was that housing regulations and prevention measures needed beefing up. However, the investigations were only the first part of the saga between the government and the victims of the storm. Days after the storm had passed, the government announced that some houses wouldn’t be rebuilt, and that the people living in the most dangerous areas would be displaced to homes on safer ground, with compensation. But when the prefect of Vendée, Jean-Jacques Brot, announced the terms of compensation, he elicited a massive protest among locals unhappy with the terms offered.

2. THE STATE, THE DISPLACED, AND THE CONTROVERSY OVER “BLACK AREAS”

2.1. A quick and generous reaction?

The strategy of the French government after Xynthia was to act fast. The first reaction, a few days after the catastrophe, was to issue a state of emergency for the four most-affected departments (Charente-Maritime, Deux-Sèvres, Vendée, Vienne), allowing the victims to be compensated

¹⁶ In French : “homicide involontaire” and “mise en danger de la vie d’autrui”

for storm damage¹⁷. On March 16, President Nicolas Sarkozy announced in a speech that « no one would be permitted to return to live in areas where there is a risk of death.” (Sarkozy, 2010). On March 18, the prefects of Vendée and Charente-Maritime were asked to demarcate “areas of extreme danger”; their findings were made public April 8. These areas, now called “black areas”, included 1,501 houses. On April 13, Prime Minister François Fillon argued that priority should be given to those who desired to relocate away from dangerous areas. He claimed that, “if we had gone by normal procedures, residents would have spent many months in temporary housing, not knowing where they would live or how to go about repairing their houses.” (Fillon, 2010).

Having one’s house within a demarcated “black area” carried a double significance, one good and one bad. On the good side, owners who consented to sell their houses to the state were offered highly advantageous conditions: “an unprecedented measure for our country”, Fillon called it (Fillon, 2010). Though compensation was based on market value before the storm, the payments were regulated by the Major Natural Disaster Prevention Fund, also known as the Barnier Fund. Created in 1995, the fund had a cap on payments at 60,000 euros per house, but this cap was raised suddenly in May 2010 to 240,000 euros per house—a major windfall for owners who sold voluntarily (Roux-Goeken, 2010). Such voluntary sales were well-received, and are likely to be re-enacted by the French government after future emergencies. On the other hand, for those who did not sell voluntarily, the “black area” meant a forced expropriation of one’s property by the state (Presse Ocean, 2010b). Unsurprisingly, it was such cases that engendered a protest movement from dissatisfied owners who refused to leave voluntarily.

2.2. Hasty demarcation of the “black areas” and poor communication lead to protest

“The state announced the black areas as areas of massive destruction”, explains Renaud Pinoit the vice-president of the Avif (the association of victims of La Faute-sur-Mer)¹⁸. The lawyer Hervé Cassara, from the Huglo-Lepage firm (which represents Avif), described the forced expropriation of land as “a second crushing blow to the heads” of the

disaster-stricken homeowners along the coast.¹⁹ Demonstrations emerged, with protesters carrying signs saying “spared by Xynthia, hit by the state” and “leave us our houses, we have other solutions”. Boyardville, a town in Charente-Maritime, even “seceded” from the state, creating the “Free State of Boyard” by a vote of 288-11. Vote organizers declared that “the state doesn’t respect our liberty to live in a place where there is no danger.”

The protest movement was triggered by three factors. First, the decision-making by prefects was so rapid that data assessment was incomplete and field work was precluded, so some decisions were taken on the basis of estimates rather than hard data. Second, the government and the prefects used a brusque and sometimes incoherent communication strategy. Third, the unusual procedures of assigning “black areas” elicited public confusion.

The demarcation of black areas was executed with tremendous speed. Three days after they received orders from the government, the prefects had proposed initial maps to the Ministries of Ecology, Energy, Sustainable Development, and Maritime Affairs. Though these ministries offered comments and feedback, 90% of the initial maps remained unchanged (Anziani, 2010:34). When these maps were made public, disaster victims reacted with surprise and discontent. “In the initial black areas, there were some houses that had not suffered any damage, there were even houses two of three meters above sea level,” explains Renaud Pinoit²⁰.

On April 15, Corine Lepage, a lawyer for Avif, sent a request to the administrative court of Nantes, asking for the documents and assessments on the basis of which the black areas were demarcated. The request was accepted by the court, which ordered the prefect of Vendée to release these documents on April 29.²¹ On May 14, the prefect responded by releasing eight pages of documents—far less than had been requested by Avif. Despite their limited scope, the court accepted the documents as sufficient on May 27. Cassara, Avif’s lawyer, argues that this release of documents proves that, contrary to the government’s claims, “there were no [comprehensive] assessments” prior to the drawing of “black areas.”²² In this part of the controversy, Vendee was a special case, as the

17. Without this text, insurance companies only cover wind and rain damages, not flood damages, much more important.

18. Interview with Renaud Pinoit, vice-president of the Avif, conducted on August 2nd 2011.

19. Interview with Hervé Cassara, lawyer of the cabinet Huglo-Lepage defending the Avif, conducted on July 26th 2011.

20. Interview with Renaud Pinoit, vice-president of the Avif, conducted on August 2nd 2011.

21. Tribunal Administratif de Nantes, ordonnance du 29 avril 2010 relative au référé n°1002332.

22. Interview with Hervé Cassara conducted on July 26th 2011.

French Senate reported that experts contributed more than 5,000 work hours to complete assessments in Charente-Maritime before “black areas” were designated (Anziani, 2010:34).

The Xynthia case also highlights the problems of a poor communications strategy. Initially, the prefect of Vendée, Jean-Jacques Brot, emphasized the danger of living in these areas and the necessity of displacing residents. It was not until April 15 that the government tried to adjust its message. It changed the terminology, from “black area” to “solidarity area”, and stressed the generous terms of compensation offered. Though it initially claimed that no modifications would be made to “black areas”, it later relented: 184 houses were removed from the “black area” designation on September 20 (though 11 previously unlisted houses were also given the designation.) “There is no doubt whatsoever that the confusion in public communications was an aggravating factor in the vigorous reaction from the affected population,” the French Senate noted in its report (Anziani, 2010:35).

Lastly, the legally vague status of the “black areas” further aroused public discontent. Cassara notes that the black areas are “a legal UFO...with no legal basis, it is neither in the urban planning code, nor environmental codes, nor property expropriation codes.” It was created to move faster, to show that something was being done”. He and his colleagues with Avif argue that normal legal procedures for expropriation should have been followed. Indeed, when Avif went to court in January 2011, the court ruled that judgment was impossible since the black areas “had no legal base”—leaving the homeowners in the midst of a “catch-22” situation.

2.3. Extent of the discontent

For some people, the opportunity to sell their house to the state was met with relief. In La Faute-sur-Mer, “in [the most dangerous] half of the black area, everybody was happy to sell their house”²³, says Renaud Pinoit. Pinoit further argues that those who lived through the storm wanted to leave as soon as possible, while those who lived permanently elsewhere “could not imagine being in any danger, even with two meters of water flooding their houses.”²⁴

In the end, many people sold voluntarily. By February 1, 2011, 1,113 of 1,574 homeowners in “black areas” had agreed to sell, and 794 of them had already been sold (at a cost of more than 200 million

Euros) (Ministry of Ecology, 2011a). Conversely, only 103 houses (79 in Vendee and 24 in Charente-Maritime) had been expropriated.

3. THE FUTURE OF DEVELOPMENT ALONG THE COAST LINE

The damage caused by Xynthia led the French Senate to observe that “the risk of sea level rise and coastal flooding has, up to now, largely been ignored in laws and regulations, as well as in population protection measures enacted at the local level” (Anziani, 2010:89). In February 2011, the government enacted a “Plan Against Rapid Coastal Flooding” (Ministry of Ecology, 2011a). This plan is meant to set forth a five-year “roadmap” for national and local planning on the issue. This new effort, along with the review of existing flooding risk reduction plans in La Faute-sur-Mer and L’Aiguillon-sur-Mer, has triggered a new debate: should the emphasis be put on the control of development in areas exposed to natural risks, or should these areas be better protected by dikes?

3.1. The Plan against Rapid Coastal Flooding: a priority given to the control of development

Even if Xynthia showed how dangerous some areas can be, “Xynthia has not tarnished the dream of a house next to the sea” (Kerjouan, 2011). Insee, the French national statistics institute, projects that the population of Vendée could add 240,000 people within 30 years, bringing the total population close to one million (Insee, 2010). The Plan proposes axes for action to reduce vulnerability in the face of such demographic pressure. Two axes are geared at improving knowledge, monitoring, and alert systems, as well as public awareness of natural hazards. The other two are meant to control development and improve physical protection infrastructure.

Xynthia exposed the fact that tools meant to control development in dangerous areas have not been fully used. Natural Disaster Prevention Plans (of which Flooding Risk Prevention Plans are a part) are designed by national government authorities, in concert with local authorities, and are approved by city councils. Such plans delineate three types of areas: “green” (suitable for construction), “blue” (construction suitable under certain conditions), and “red” (construction not suitable). Yet at the time of the storm, only 46 of 864 communes exposed to the risk coastal submersion in France had approved flooding prevention plans; another 71 had been asked to adopt a plan but had yet to do

23. Interview with Renaud Pinoit conducted on August, 2nd 2011

24. Ibid.

so (Anziani, 2010:23). A key measure of the Plan Against Rapid Coastal Flooding is to accelerate adoption of new Flooding Risk Prevention Plans²⁵, and to revise some existing ones. At the time of the storm, 21 coastal towns in Charente-Maritime had approved a risk prevention plan, but none in Vendée. The new national Plan calls for 62 new plans to be adopted in Charente-Maritime (and 19 to be revised), while also calling on 17 plans to be adopted in Vendée (Ministry of Ecology, 2011a).

With regard to dikes, the first action taken was to repair 120 km of dikes in Charente-Maritime and 80 km of dikes in Vendée damaged by the storm (Ministry of Ecology, 2011a). The new Plan Against Rapid Coastal Flooding also establishes a roadmap for improving existing dikes. This is more complex than it may seem, as 3,000 km of the 8,000 km of dikes in France are “orphan dikes”, without identified owners (Ministry of Ecology, 2011b:30). Dike rehabilitation is expected to begin at the earliest by the end of 2011.

The twin goals of development control and dike construction highlight a tension in priorities. For example, in a speech on March 16, 2010, President Sarkozy noted that “in high flooding risk areas, it will not be possible to build houses behind dikes anymore. Indeed, sooner or later, no matter how high or solid, these dikes will be submerged” (Sarkozy, 2010). The Plan against Rapid Coastal Flooding adopts the same position, stating that “any work likely to be put in charge, even in exceptional cases, can be considered safe” and thus, “new dikes will not be used to open new areas for development.” (Ministry of Ecology, 2011b:17). Thus, the official state position is that dikes should be the protection tool of last resort (Ministry of Ecology, 2011b:17).

3.2. Diverse positions among the disaster victims

The land use planning discussions in the wake of Xynthia inspired great debate in the coastal communities affected by the storm. In August 2010, a new Flooding Risk Prevention Plan was made public for La Faute-sur-Mer and L’Aiguillon-sur-Mer. Public consultations lasted through the end of 2010, and a second round of consultations are still underway. Meanwhile, groups that had mobilized in the wake of the storm (including “L’Avenir ensemble” in L’Aiguillon-sur-Mer and the “Association pour la défense des propriétaires fautais” in la Faute-sur-Mer) organized September demonstrations that drew 700 people. These groups

protested against the Flood Risk Prevention Plans on the basis of their negative economic impacts. Indeed, they took a far more radical view than Avif, which does not endorse unrestricted development in new parts of the coast.²⁶

Pinoit, of Avif, notes that the new rules are being “tested” in Xynthia-affected communities: “The Risk Prevention Plan in La Faute-sur-Mer and L’Aiguillon-sur-Mer is likely to influence the other Risk Prevention Plans adopted elsewhere in France, which will cover five million people nationwide.” With the coming presidential election (April-May 2012), Pinoit feels that the government ministries are in no hurry to move quickly this time.

Moreover, Avif considers dike repair a top priority. “Before establishing risk prevention plans, we should make sure the existing protections are up-to-date. Let’s first protect what is built, and then adapt the houses and set rules for development...people died in houses with a second floor too”, says Pinoit. And while some feel there is time before the next storm, Pinoit notes that La Faute-sur-Mer suffered two floods in the space of four months in 1940-1941.

CONCLUSION

The Xynthia storm highlighted significant gaps in the French system of flood control and population protection in coastal areas. In addition, the response of the government, the protests of the victims, and the attempts to address coastal development policy add complexity and intrigue to this case. From outside, one might be tempted to dismiss the protest movement. Indeed, the compensation provided by the state was very favorable to disaster victims. However, this essay tries to highlight a different view. The controversy over “black areas” was due more to the form than the content. The lack of assessment and the poor communication strategy from the government was more problematic than the idea of displacing people from dangerous areas. These problems imply that the government significantly underestimated the psychological sensitivities of the migration/displacement process.

This is not to say that people may justifiably live wherever they choose, even in areas of mortal danger. But it is to say that precautions should be taken when displacement is necessary. Moreover, there are reasonable disagreements about how far development control policies should go. While the central government is more in favor of restricting

25. « Plan de Prévention des Risques d’Inondation » (PPRI) in French

26. Interview with Renaud Pinoit conducted on August, 2nd 2011

coastal development, local authorities and civil society groups prioritize protection through the system of coastal dikes.

Xynthia is likely to be an important precedent for future crisis management. Yet key questions remain unanswered: how to go about moving people from their homes, how to pay for the expensive

process of compensating displacees, and how to balance development and planning policy with the construction and maintenance of physical protective infrastructure. Future generations of French policymakers will have to continue to work through these difficult issues in the years and decades to come. ■

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