



Youth Perspectives on Climate Adaptation in the French Pyrenees

Prepared by Association Petite Graine and Maida CBO – October 2025

Executive Summary

- Climate disasters in both the French Pyrenees and Kibera (Kenya) reveal deep structural gaps in local climate adaptation and a critical absence of youth participation.
- Young people, particularly in rural and marginalised areas, remain excluded from decision-making, even though they are among the most affected by floods and droughts.
- Public authorities are insufficiently prepared, both in terms of infrastructure resilience and in effectively informing and preparing the population.
- In France, the cases of Luchon (floods) and Caramany (droughts) illustrate how national and EU adaptation frameworks fail to translate into local action:
 - In Luchon, flood forecasting and alert systems remain non-functional more than a decade after the 2013 floods.
 - In Caramany, drought management still relies mainly on restrictive decrees rather than proactive water management or community-led solutions.

Recommendations

- Meaningfully engage with local populations, especially youth, to actively participate in designing and monitoring climate adaptation measures.
- For floods, strengthen the early-warning system by improving prediction and alarm raising, and implement efficient preventive measures (e.g. lower mountain lake levels, restore riverbanks).
- For droughts, support community-led water solutions through rainwater collection, natural filtration, canal restoration, and climate-resilient farming.

About the Campaign: Voices Unheard from Pyrenees to Kibera

The project *Voices Unheard from Pyrenees to Kibera (VUPK)*¹ is supported by the [AU-EU Action Lab](#), a European Union-funded programme that enables youth-led organisations from Africa and Europe to co-create and implement joint initiatives. It is implemented by Oxfam, the European Youth Forum, and Restless Development Uganda.

This programme was established by the [EU Youth Action Plan for External Action 2022–2027 \(YAP\)](#), the EU's strategic framework to strengthen the meaningful participation and empowerment of young people in its external relations. The YAP's vision for youth is reflected in the [AU-EU Youth Lab](#), a platform for dialogue and partnership between young people from both continents. Within this framework, the AU-EU Action Lab turns ideas into action by supporting concrete youth-driven projects such as VUPK.

VUPK addresses youth inclusion in climate adaptation policy, highlighting common challenges faced by young people in France and Kenya, particularly those from marginalised backgrounds, whose voices are often excluded from policymaking processes.

The project stems from a shared issue: both Kibera and the Pyrenees have been severely affected by floods, with devastating impacts on their communities, as well as by water shortages, droughts and even wildfires. Climate disasters disproportionately affect the most vulnerable and marginalised groups, especially young people in rural or underserved areas. These youth often lack access to decision-making spaces where they can express their concerns, needs, and ideas regarding climate policy.

In response to this reality, the project aims to empower young people from affected communities to engage with decision-makers and contribute ideas on how to lead climate adaptation efforts and improve community preparedness. The project includes a climate advocacy programme with meetings with key policy actors at international, national and local levels to help amplify the voices of young people from these communities and ensure their voices are better taken into account in policymaking forums.

This brief is structured in five parts:

Part 1 sets the context and examines the impacts of climate disasters on young people in the Pyrenees (floods in Luchon and droughts in Caramany);

Part 2 reviews EU, national, regional, and local policy frameworks, highlighting key gaps in implementation and governance;

Part 3 presents youth testimonies, capturing their lived experiences and proposals for action;

¹ Learn more about the campaign on [LinkedIn](#), [Instagram](#), [TikTok](#).

Part 4 translates these insights into concrete recommendations for policymakers;

Part 5 provides a dedicated focus on Kibera's 2024 floods.

Part 1 - Local Realities: Two Case Studies

This policy brief explores two telling case studies on climate change events, different in nature, that have impacted two different communities in the Pyrenees, located in the region of Occitanie. Luchon has suffered from severe floods in June 2013, whilst Caramany suffers from water shortages due to prolonged droughts since 2022.

1.1. Luchon

1.1.1. Presentation of Luchon

Bagnères-de-Luchon is a small town in the heart of the Pyrenees, with 2,081 inhabitants; it lies at the foot of the mountain chain of the Pyrenees. Situated at 630 metres above sea level, the town is surrounded by mountains rising to 2,100 metres at the Superbagnères ski resort and up to 3,404 metres at the Aneto, the highest mountain on the Spanish side. It is a town centred around water: the thermal baths, the ski station, production of hydroelectricity with a network of dams taking advantage of mountain lakes. Two rivers flow through the city, the Pique and the One, coming down from the mountains and feeding from smaller springs. Both rivers spilled over in 2013 causing a major flood, a phenomenon that was experienced throughout the Pyrenees on the French and Spanish sides.

1.1.2. The June 2013 Floods

On 18 and 19 June 2013, Luchon was severely impacted by a flood, with both rivers bursting their banks, becoming torrents of mud and organic waste, flooding large parts of the city. The flood resulted from the combination of three climate factors: a winter with the heaviest snowfall in 40 years and a cold winter that delayed the snowmelt, very heavy rainfall throughout the spring and snowfall at high altitudes that maintained the snow cover on the mountains, and a very hot start of June with temperatures well above the monthly averages between 9 and 16 June. This caused snow melting leading to strong river flow.² On top of this, a storm with hot southern wind, with very heavy rainfall over 24 hours, triggered the flood on 17 and 18 June.

The flood itself was a very sudden weather event. The flow of the river increased very suddenly, the increase and fall occurred over about 10 hours. The flood reached its peak on June 18 at 12 pm, with a peak of water of more than 4 metres when it is normally not more than 1.5 metres on average in June. The flood brought water, mud, organic and tree debris and deteriorated houses and infrastructure. The floods

² SDIS 31 (2013). [Inondations Haute-Garonne, June 2013: RETEX](#). Service Départemental d'Incendie et de Secours de la Haute-Garonne.

caused three fatalities and massive material damage, with a financial cost estimated at more than €35 million in the Garonne and Pique valleys.³

The UNDRRR defines a disaster as “a serious disruption of the functioning of a community or a society involving widespread human, material, economic or environmental losses and impacts, which exceeds the ability of the affected community or society to cope using its own resources.”⁴ Researchers concluded that in many respects, the torrential flood of June 18 and 19 displayed the characteristics of a disaster: houses swept away, roads cut off, campsites flooded, farms damaged, etc.⁵

1.1.3. The Lack of Preparedness Revealed

The flood revealed a series of systemic shortcomings. They can be narrowed down to three: early warning and prevention, conduct of relief operations by authorities, and preparedness of dams and dikes.⁶

The feedback report highlights flaws in the early warning and prevention system. Following the accumulation of exceptional climatic conditions during winter and spring, the national weather service (Météo-France) raised concerns about rainfall levels in the region. Météo-France shared these concerns during a ministerial audio-conference on 30 May 2013, but aside from information gathering by the State administration, these warnings did not lead to effective anticipation or communication of risks at the local level.⁷

The national flood vigilance system, Vigicrues, also failed to reflect the seriousness of the situation. Despite clear hydrometeorological indicators of a major flood, the vigilance level for the upper Garonne remained classified as orange throughout the event. Authorities justified this by stating that the flood was localised, did not paralyse large parts of the urban area under observation, and that maintaining the orange level allowed resources to be focused on the Gave de Pau area, considered a higher priority.⁸ This decision exposes confusion over the criteria for a red alert: should widespread urban paralysis occur before triggering it, or is an immediate but localised threat to lives sufficient? It also raised uncertainty over the purpose of red vigilance, whether it primarily aims to inform populations at risk, or to guide operational priorities. In reality, the torrents were extremely violent, surpassed historical records in certain areas, and posed an immediate threat to human lives.⁹

³ Sturma et al., 2017, [La crue de juin 2013 dans les Pyrénées garonnaises](#).

⁴ UNISDR (2009). [UNISDR Terminology on Disaster Risk Reduction](#).

⁵ Sturma et al.

⁶ DREAL Midi-Pyrénées (2013). [Crues des Pyrénées des 18 et 19 Juin 2013](#).

⁷ DREAL, p. 42.

⁸ DREAL, p. 3.

⁹ *Ibid.*

Beyond the decision not to raise the alert level to red, the report identifies structural limits of Vigicrues, the national flood forecasting and alert system managed by the French State, which does not provide 24-hour forecasting for the Pique valley.¹⁰

The Vigicrues station in Luchon only performs direct observation. The area is excluded from Vigicrues forecasting system on the grounds that upstream mountainous torrents are difficult to model accurately.¹¹ The Pique valley thus remains outside the national forecasting network, despite having already suffered a major flood in 1925. Because it is not among the monitored sections, the municipalities along the Pique are excluded from the departmental flood alert regulation and therefore received no warnings via the Vigicrues system on 17 June. Indeed, for other communes under surveillance, Vigicrues alerts were issued on 17 June at 4:58 pm, while Luchon municipality only received the orange alert for floods from Météo-France at 6:25 pm.¹²

The first floods were observed in the area on the morning of June 18 at 6:30 am, yet the public was only informed by a prefectural press release at 9:00 am, a telling delay in warning the population.¹³ This mismatch between alerts to the municipality (the day before at 6:25 pm) and public notification (the next morning at 9 am) illustrates the dysfunction of the alert chain. This fundamental gap in the early warning system cost precious hours for the population to prepare. To this day, this segment of the river remains outside State monitoring under the Vigicrues flood risk information system.

The report also notes that there was no contact with the Spanish authorities in the Val d'Aran (the valley on the Spanish side) during the flood and subsequent crisis management. In the first hours it remained unclear whether the sudden rise of the Garonne was due to dam releases in Spain or intense upstream rainfall.¹⁴

Second, the crisis management revealed persistent confusion and delays in communication between departmental and communal levels. The Departmental Operational Centre (COD, or *Centre Opérationnel Départemental*), an emergency room coordinating relief operations, was activated at the prefecture in Toulouse, while in Luchon the PCS, the crisis management plan in the event of major risks, was activated under the mayor's authority.

However, the SDIS, the departmental fire and rescue service, noted that the Municipal Command Post (PCC, or *Poste de Commandement Communal*) around the mayors only operated within a communal perimeter and was unsuited to a flood extending across the entire river basin.¹⁵ Centralising decisions at the COD in Toulouse created further gaps: rescue teams lacked timely information, and instructions from the COD often failed to reflect on-the-ground realities.¹⁶ The SDIS

¹⁰ DREAL, p. 3.

¹¹ Sturma et al.

¹² DREAL, p. 45.

¹³ DREAL, p. 6.

¹⁴ DREAL, pp. 35-36.

¹⁵ SDIS, p. 23.

¹⁶ SDIS, p. 25.

therefore recommended establishing a supra-communal coordination level with greater autonomy in emergency decision-making, through the creation of a decentralised operational post in the valley, but this proposal was not adopted by the Prefect.¹⁷

Third, there were major gaps in information sharing regarding hydraulic infrastructure, dams, and dikes. Knowing their condition during the crisis is crucial for public authorities to ensure public safety, as a dam failure could have catastrophic consequences. The prefecture reported difficulties obtaining reliable, real-time information from operators, particularly on the Castelvieu dam, the dam on the One, and the dikes.¹⁸

The crisis also exposed shortcomings in infrastructure preparedness. Dams were stretched to their limits: the Lac d'Oô dam overflowed at 12:30 pm, flooding the village below with 30 cm of water, while the dam above Montauban-de-Luchon was only 1.5 m from capacity.^{19,20} Better anticipation and lowering lake water levels could have improved retention capacity during the flood. The Lac d'Oô dam could not perform its usual regulating function because it was under renovation, and the Luchon hydroelectric turbines were inactive and could not regulate water levels, turning the lake into a spillway that worsened the overflow.²¹

Several dikes also failed, flooding nearby houses. For instance, the dikes of Salles and Pratviel failed and required emergency repairs, and the defensive walls in Luchon were damaged over a distance of 3 km.^{22,23} The Castelvieu dam along the Pique, designed to trap rocks and sediments, was completely overwhelmed: the 2013 flood filled it to its full 90,000 m³ capacity with an inflow of about 20,000 m³ during the event, showing that maintenance dredging and capacity upgrades should have been carried out earlier. Since a centennial flood brings around 30,000 m³ of sediment, the dam was not prepared to withstand such a flood. Emergency works were conducted to lower and stabilise the dam structure.²⁴

1.2. Caramany

1.2.1. Presentation of Caramany

Caramany is a small village located in the Eastern Pyrenees, with 130 inhabitants. The climate and environment of Caramany can be described as Mediterranean, dry, and rocky, shaped by a combination of garrigue, scrubland, vineyards, and rugged terrain. The area experiences very hot summers, limited water resources, and is frequently affected by droughts.

¹⁷ SDIS, p. 23.

¹⁸ DREAL, p. 25.

¹⁹ SDIS, p. 62.

²⁰ SDIS, p. 64.

²¹ "Envahi par les eaux boueuses, le village d'Oô revit le drame de 2013" [La Dépêche, 14 Juin 2018](#).

²² SDIS

²³ DREAL, p. 19.

²⁴ Autorité environnementale (CGEDD), Avis n°2018-11, 25 avr. 2018, [curage barrage Castelvieu \(31\)](#).

The local economy is largely focused on vineyards and wine production. Caramany is experiencing a revival with the arrival of young, dynamic professionals and young parents who are revitalising community life. This is the reason why the project is working with this community.

1.2.2. Drought and Water Crisis

Caramany has experienced a severe drought since 2022, which has reached critical levels in 2025. It is one of the few territories in France classified at 'crisis' level on [VigiEau](#), the national monitoring tool for drought and water access, this level being the highest of five alert levels.

State decrees are regularly updated imposing strict water restrictions depending on drought severity. The decree on which this policy brief is based (July 2025) limits water access exclusively to priority needs.²⁵ For instance, in Caramany, water use is now strictly limited to essential needs. All non-priority uses such as lawn watering, car washing, pool filling, are banned. Watering vegetable gardens is restricted to night-time, if reserves allow. Water is treated as a protected resource, with controls and fines in place to ensure responsible use. Agriculture, the main economic activity in the area, is suffering heavily. All withdrawals from rivers and streams are banned, except to water livestock. Irrigation of vegetable crops and vines is reduced by 80% for gravity-fed systems and by 50% for drip irrigation.

This crisis deeply affects daily life in Caramany, where many residents depend on small-scale farming, wine production, and local food production. Strict water restrictions put additional pressure on low-income households, who often rely on vegetable gardens. Young people working in seasonal agricultural jobs see their livelihoods threatened, while local winegrowers and smallholders face mounting losses as irrigation becomes nearly impossible. In this rural context, the situation and restrictions reinforce existing inequalities and underscore the urgent need for tailored support measures to protect the most exposed populations and sustain the local economy.

The habitability of the Pyrénées-Orientales is under growing pressure, as the prolonged drought threatens basic water access and agricultural viability. Some villages have already had to rely on emergency deliveries of water by truck to fill water towers and water bottles.²⁶ Others have experienced complete water cuts, with nothing coming out of the tap.²⁷

1.2.3. Poor Water Management

²⁵ Préfecture des Pyrénées-Orientales (2025). [Arrêté préfectoral n° DDTM/SER/2025/196/0001](#), 15 juillet 2025.

²⁶ Martine Valo, « Sécheresse persistante dans les Pyrénées-Orientales : "Cette fois, c'est du brutal" », [Le Monde](#), 22 avril 2024.

²⁷ 42 communes des Pyrénées-Orientales "sous tension" pour l'accès à l'eau potable. [ActuPerpignan](#), 19 avril 2024.

There is an urgent need to rethink local agriculture. As one local farmer puts it, there is the need for “a resilient kind of agriculture, adapted to a changing climate, with drought-resistant crops like pistachio, caper, carob, vetiver, and chickpeas.”²⁸ This also involves reconsidering water-intensive production such as peach and apricot orchards or traditional vegetable farming.²⁹

Yet instead of addressing these structural challenges, public discourse often turns to technological quick-fixes. In 2024, the Minister for Ecological Transition announced a plan to extend water canals from the Rhône to Montpellier and further to the Eastern Pyrenees³⁰, presented as a silver bullet solution, yet failing to address the root causes of unsustainable water use. At the same time, some decisions appear entirely disconnected from local realities, such as the approval of a new golf course in Villeneuve-de-la-Raho, which was strongly criticised by environmental NGOs.³¹

Recently, in an open letter, 92 academics and scientists called for the territory to be rethought as “habitable and resilient” in the face of long-term water stress.³² In this letter, they denounce the continued construction of new housing and residential areas, the creation of the new golf course, which exacerbate water tensions with other key economic sectors such as agriculture, vegetable farming, or hydroelectric production from dams. They call for anticipation and adaptation to climate warming and for a rethinking of territorial planning in the Eastern Pyrenees according to the paradigm of sobriety: sobriety in water use, land use, and energy use. They emphasise the need to redefine collective living through the mobilisation of all stakeholders to keep the territory livable and desirable.

Part 2 - Policy Frameworks & Gaps: Are We Equipped?

2.1. European Union Level

At the EU level, there is wide recognition of the climate crisis and the need to implement adaptation measures. EU Heads of State and Government, meeting in the European Council, have recognised that in the face of the increased frequency and intensity of extreme weather events which highlight the urgency of a global response to the climate emergency, climate adaptation and mitigation efforts are key to strengthening the EU's resilience and crisis response capacity.³³

The EU's climate adaptation policy response is founded on three components. First, the European Climate Law (2021) sets into law the objective of becoming a climate-neutral society (mitigation) and climate-resilient society (adaptation) by 2050,

²⁸“ « On a le climat de Casablanca » : le Roussillon, en manque d'eau, contraint de s'adapter”, [Ouest-France, 21 mars 2024](#).

²⁹“On prie pour avoir de l'eau”, [France Info, 21 Mars 2024](#).

³⁰Face à la sécheresse, un mégaprojet pour pomper le Rhône, [Reporterre, 24 Mai 2024](#).

³¹En pleine sécheresse dans les Pyrénées-Orientales, un projet de golf « exemplaire » provoque une mobilisation, [Le Monde, 16 mars 2024](#).

³²Pour un territoire habitable et résilient”, [L'Indépendant, 6 février 2024](#).

³³ European Council Conclusions, [EUCO 14/23](#) (26–27 Oct. 2023), para. 26.

translating the commitment laid out in the Paris Agreement³⁴.

In particular, Article 5 tackles adaptation to climate change and commands Member States to ensure that policies on adaptation in the EU and Member States are coherent, ensure better integration of adaptation in all policy areas, including the EU's external policy. Key to the VUPK project, it recognises the necessity to prioritise the most vulnerable populations and improve climate policies through consultations. Indeed, EU Institutions and Member States *“shall focus, in particular, on the most vulnerable and impacted populations and sectors, and identify shortcomings in this regard in consultation with civil society”* (Article 5, para. 3). Article 9 on public participation further states that the Commission shall engage with all parts of society and facilitate an inclusive and accessible process at all levels for the exchange of best practices and to identify actions to contribute to the objectives of mitigation and adaptation.

Second, the EU Climate Adaptation Strategy (2021), building on the 2013 strategy, sets the goal of achieving a climate-resilient Europe by 2050.³⁵ It calls for adaptation that is smarter, more systemic, swifter, and more international, reflecting a comprehensive approach to managing climate risks across all levels of society:

- Smarter, by strengthening knowledge and modelling of the impact of climate change, and making information more accessible through *platforms such as Climate-ADAPT and the European Climate and Health Observatory*.
- More systemic, by ensuring that adaptation is mainstreamed across all sectors and policies from agriculture and energy to finance and infrastructure and by promoting nature-based solutions such as wetland restoration, urban greening, and reforestation as effective, low-cost tools for resilience.
- Swifter, by closing the gap between planning and action, accelerating investment in adaptation, and scaling up the deployment of tested solutions. This involves translating research and innovation into practice through programmes such as Horizon Europe and LIFE.
- More international, emphasising solidarity with vulnerable regions, in particular Africa and Small Island Developing States, through increased climate finance and strengthened cooperation on adaptation planning and capacity-building.

Third, the upcoming EU Resilience and Preparedness Plan, to be adopted by 2026, aims to turn this vision into action across Europe.³⁶ Its purpose is to turn the EU's adaptation vision into concrete action, ensuring that Member States, regions, and sectors are better prepared for escalating climate risks. While details are still under development, the plan is set to focus on several priority areas:

- First, making sure that there is ownership for climate risks everywhere, in all sectors and at all levels. It is a question of subsidiarity, the local level, but it needs to be equipped and take ownership, including cross-border cooperation.

³⁴ [Regulation \(EU\) 2021/1119](#) establishing the European Climate Law.

³⁵ [EU Strategy on Adaptation to Climate Change](#), COM(2021) 82 final.

³⁶ Information based on Kurt Vandenberghe's keynote, "Adaptation to Climate Change," [EconPol Annual Conference](#), Brussels, 19 May 2025.

- Second, the need for a common definition and a common EU framework for assessing, managing, and communicating risks. It includes, for example, running tests of a 4°C scenario in Europe across all sectors like it is done in France through its climate adaptation policy (PNACC 3).
- Third, making climate intelligence and tools accessible to all public and private actors so that they are equipped with knowledge of the risks and can prepare better. A lot of data and intelligence is available, but it needs to be downscaled so that every local authority can have access to this data and prepare better.
- Fourth, creating a market for climate solutions: flood defence systems, building materials that withstand heat and floods, and water infrastructure. Favour nature-based solutions (e.g. dune restoration rather than building higher dikes).
- And fifth, tackling the issue of insurance gaps in high risk areas.

Despite the policy framework in place, there are gaps in the implementation at EU level.

First, the European Commission has not fully met its obligations under the European Climate Law to prioritise and engage vulnerable populations in climate adaptation policymaking. Young people and local communities in climate-exposed territories in the Pyrenees have had little or no opportunity to interact with EU institutions or contribute to shaping adaptation measures that directly affect them.

Second, Member States are failing to implement the Climate Adaptation Strategy. The European Commission reports significant gaps in assessing the investment needs for adaptation by Member States and the EU, and most countries lack dedicated budgets for financing these actions.³⁷ The European Commission also reports that much more needs to be done by the Member States on governance aspects, awareness raising, fairness and just resilience, financing and nature-based solutions. It also notes a discrepancy between what is presented in the climate plans and the planned and implemented adaptation measures. As a consequence, it warns that progress is not keeping pace with accelerating climate change, both the EU and Member States “must become significantly better at preparing for and effectively addressing climate risks.”³⁸

2.2. National Level

Floods and droughts already exact a heavy toll in France, with annual flood damages reaching up to €800 million and the 2022 drought alone costing over €5 billion.^{39,40}

The French climate adaptation policy can be found principally in the National Plan for Adaptation to Climate Change (*PNACC, Plan national d’adaptation au changement climatique*). It is now in its third updated version, published in March 2025. The

³⁷ Commission Staff Working Document, [Assessment of progress on climate adaptation in the individual Member States](#), SWD (2023) 932 final.

³⁸ European Commission, COM(2024) 91 final, [Managing climate risks – protecting people and prosperity](#).

³⁹ [Stratégie nationale de gestion du risque d’inondation](#), Ministère de l’Écologie, 2014.

⁴⁰ Ministère de la Transition écologique, *Sécheresse 2022 – Bilan national, avril 2025*.

PNACC 3 is a comprehensive document of 388 pages containing 52 measures and more than 200 actions to adapt French society to climate change. A key measure is that the assessment and accompanying measures are elaborated based on this +4°C warming trajectory. Indeed, the reference scenario projects an average temperature increase of +2 °C in 2030, +2.7 °C in 2050, and +4 °C in 2100 compared to the pre-industrial era. This warming is expected to have massive consequences: a reduction of about 10% of GDP and agricultural losses of around €1 billion by 2050.

The following analysis will focus on measures 3 and 6 on flood prevention and mountain risks (relevant for Luchon), measure 7 on wildfires and measure 21 on drought management (relevant for Caramany). Finally, measures 47 and 48 address governance, citizen participation, and youth empowerment.

Measure 3 focuses on protecting the population against floods by adapting flood prevention policy. With climate change, one in five people in France, about 13 million people, are exposed to flooding risks. Under this measure the following actions are identified:

- Strengthen State support for local and regional authorities in implementing their legal responsibility for the management of aquatic environments and flood prevention (otherwise called the GEMAPI competence), by helping them identify the most exposed areas to flood risks and define appropriate prevention and protection measures. This includes guidance on the design and upgrading of hydraulic structures and dikes, the use of nature-based solutions, reducing exposure and vulnerability, raising public awareness, and improving crisis management capacity.
- Expand the national flood warning service (Vigicrues) so that by 2030 it provides full coverage of France. The models and prediction tools are developed from 2024 to 2028. This means that despite the shortcomings revealed during the 2013 floods, Luchon will only be potentially covered by Vigicrues in 2030.
- Promote the use of local flood prevention plans (PAPI, *Programmes d'Actions de Prévention des Inondations*, or Flood Prevention Action Programmes), which is a basin-wide flood management scheme designed to coordinate risk reduction measures across multiple municipalities.
Also promote the adoption of mountain risk-prevention strategies (STePRiM, *Stratégies Territoriales de Prévention des Risques en Montagne*, or Territorial Risk Prevention Strategies in Mountain Areas) which is a comprehensive strategy set up by a group of local authorities to manage natural hazards such as torrential floods, rockfalls, avalanches, and landslides. Luchon is not part of a PAPI, but part of the first French STePRiM within the Community of Municipalities of the Upper Garonne Pyrenees, an intercommunal entity gathering 76 communes.

- Integrate the 4°C warming scenario into flood-risk assessments and the design of protection infrastructure to ensure that public investments are climate-resilient and avoid maladaptation.
- Promote the maintenance of rivers and canals through nature-based solutions, such as wetland restoration or hedges, to better regulate floods.
- Foster a stronger “risk culture” among the French population to improve awareness, preparedness, and responsiveness to flood risks. This could take place on the National Day for Resilience on October 13 for instance. Also organising communication campaigns with the support of civil society actors (NGOs, local level, companies). The measure also highlights the importance of extending participatory approaches, so that citizens become active players in their own safety.

Measure 6 concerns protecting populations from natural risks in mountain areas. Actions include:

- Improve research on the impact of climate change in mountainous areas and risk of torrential floods, landslides, debris flows and avalanches.
- Integrate this improved research in prevention plans.
- Local authorities exposed to mountain risks will have to put in place flood risks surveillance and undertake preventive actions such as establishing protective infrastructure against torrential floods, preventive emptying of mountain lakes, and removing rock masses.
- Foster a stronger risk culture by promoting participatory initiatives that engage the wider public as active contributors to their own safety, through awareness campaigns, communication on natural hazards, and collaboration with local mountain professionals.

Measure 7 addresses the risk of new territories being affected by wildfires under a +4°C warming scenario. This risk concerns Caramany, although it has not yet been impacted, the 2025 summer wildfires in the neighbouring Aude department underscore how present the threat is. Actions include updating risk mapping based on this warming scenario, supporting local authorities in preventing fires and protecting residents, and fostering a stronger risk culture among the population.

Most important for Caramany is Measure 21, related to droughts. It aims to ensure a sustainable provision of water despite climate change. Action items include:

- Improve knowledge of the impact of climate change on water supply in a +4°C scenario
- Make a structural shift in drought management from reaction to anticipation, and update local plans of water-management with the +4°C trajectory.

- Use digital tools to track water use and network performance, making sure water supply meets the needs without harming ecosystems.
- Improve the infiltration of rainwater into soils and optimise water storage in canals.
- Support water users, including businesses, households, farmers, and local authorities, in reducing their water consumption to reduce water use by 10% by 2030.
- Support new domestic uses of non-potable water, promoting the reuse of water not suitable for human consumption.
- Study the feasibility of seawater desalination solutions and the conditions under which they could be used.
- Tackle the issue of water pollution in catchment areas, which is aggravated by climate change as lower water volumes concentrate pollutants during droughts and heavy rainfall increases runoff, by training facilitators to coordinate local actors, promote sustainable practices, and protect drinking-water sources.
- By 2027, establish a multi-stakeholder dialogue body in each sub-river basin to anticipate conflicts, direct public funding towards adaptation, and reform water tariffs so that they encourage efficiency rather than increasing with reduced consumption.

Measure 47 aims to improve governance and stakeholder engagement in implementing France's national adaptation plan. It reinforces the role of the National Council for Ecological Transition (CNTE) in monitoring the rollout of the French climate adaptation plan. The CNTE is a body composed of elected officials but also civil society actors such as environmental and youth NGOs.

Measure 48 aims to mobilise citizens namely to offer young people the possibility of engaging in climate adaptation through the Ecological Civic Service. Several pilot initiatives are currently being tested in selected territories. The other action is to strengthen municipal civil security reserves that can be activated during natural disasters.

Relevant for Caramany, the Water Plan is worth mentioning. It is a national strategy with a specific adaptation for the Eastern Pyrenees, given the severity of the drought. It focuses on organising water sobriety, with a target of reducing usage by 10% by 2030, and on securing water supply by reducing leakages and creating interconnections between water networks. The plan also promotes the reuse of treated wastewater for non-domestic purposes such as irrigation, provides increased funding and capacities for water agencies, and seeks to revise water tariffs.

In particular, Axis 5, dedicated to drought management, focuses primarily on raising awareness among all stakeholders, local authorities, households, farmers, and industrial actors. It highlights that the VigiEau platform allows users to easily access information on current water restrictions, while the national drought guide provides clear criteria for how and when water restriction measures are implemented.

Relevant for Luchon, the National Flood Risk Management Strategy (SNGRI), adopted in 2014, defines France's overarching framework for preventing and mitigating flood risks.⁴¹ It highlighted that flood prevention policies still face key weaknesses, including insufficient knowledge of territorial vulnerabilities and unclear ownership or management of protection infrastructure such as dikes. To address these gaps, the State introduced this national strategy, which guides PGRI (Flood Risk Management Plans, or Plan de Gestion des Risques d'Inondations) at basin level and their translation into local prevention plans. Its priorities are to mobilise all institutional actors, from the State to local authorities, to strengthen prevention and protect populations. The SNGRI highlights the importance of tools such as PPRN (Natural Risk Prevention Plans), aligned with basin-level priorities, and calls for improving flood knowledge and forecasting through systems like Vigicrues.

In the event of a flood, crisis management at municipal level relies on Municipal Safeguard Plans (*Plan Communal de Sauvegarde*, PCS); the strategy promotes greater preparedness by developing a strong risk culture through evacuation drills and public awareness. It also stresses the need to ensure coordination between PCS and ORSEC (Organisation of the Civil Security Response, or *Organisation de la Réponse de Sécurité Civile*), the emergency response plan at departmental level under the Prefect's authority. Finally, it reaffirms the role of national solidarity through the CAT-NAT insurance regime for post-disaster recovery and sustained funding for prevention measures via the Fonds Barnier, which supports local authorities in implementing protective actions.

Despite the policy framework in place, several gaps persist in France's approach to climate adaptation.

First, the French policy framework involves a myriad of overlapping laws, plans, and strategies, which makes it difficult to navigate not only for the public but also for the authorities themselves. Besides the PNACC, there is also the 2021 Climate and Resilience Law, the Water Plan, the National Flood Strategy, etc. This proliferation creates complexity, overlap, and difficulty to navigate.

Second, the European Commission has noted that while France formally commits to engaging vulnerable stakeholders, its national reporting provides no evidence of actual participation. Analysis of the PNACC confirms this: public engagement is mostly limited to awareness campaigns or symbolic events, rather than structured consultation processes. The plan equates participation with raising awareness, rather than genuine involvement of vulnerable populations in the decision-making.

⁴¹ Stratégie nationale de gestion du risque d'inondation

This is particularly evident in Measure 47, which equates governance and stakeholder engagement to the consultation of a few civil-society representatives within the *Conseil national de la transition écologique* (CNTE). Such a narrow approach does not ensure that citizens, and even less so young people, who are among the most affected by climate change, are systematically involved in designing, implementing, or monitoring adaptation measures. Nevertheless regarding drought management, the creation of local stakeholder bodies by 2027 in the Eastern Pyrenees is a positive step, but details on their structure and functioning remain undefined.

This was also reflected in the elaboration of the PNACC 3 itself, which was open for public consultation for only two months, from 25 October to 27 December 2024, and received only 5,965 responses.⁴²

2.3. Regional Level - Occitanie

On the issue of climate adaptation, the French government and the deconcentrated State administration retain the core competencies, in line with France's tradition of centralism. The Occitanie Region acts mainly in the areas of economic development, spatial planning, and tourism, and primarily operates by co-financing projects in partnership with EU funds.

Demonstrating that most decision-making power remains in the hands of the State, the President of the Occitanie Region called on the French government to launch a national resilience plan for the region, stressing that the State controls the key levers, defining regulations, project authorisations, and funding, that are essential for effectively combating floods, wildfires, and droughts.⁴³

Concretely, on flood prevention, the Occitanie Region provides a flood-risk prevention funding scheme, to support local authorities in implementing flood-defence infrastructure and prevention measures.⁴⁴ This includes investment grants for infrastructure, as well as operational support for initiatives including the development and coordination of PAPI plans (basin-wide flood prevention and management plans between communes), public awareness campaigns, equipment to improve water level prediction, building dams or dikes, etc.

On drought management, the Occitanie Region is investing around €58 million between 2023 and 2027, including EU co-funding, to improve water security for agriculture through projects that create or modernise irrigation systems, storage facilities, and distribution networks.⁴⁵

⁴² Ministère de la Transition écologique, PNACC – [synthèse, 25 février 2025](#).

⁴³ Carole Delga, “J’en appelle au président de la République pour le lancement d’un grand plan de résilience en Occitanie,” [Région Occitanie, 2023](#).

⁴⁴ [Dispositif régional d’intervention pour la prévention et la réduction des risques d’inondation](#), Région Occitanie, 2023.

⁴⁵ [Gazette du Midi](#), *La Région Occitanie débloque 2,5 M€ pour garantir l’accès à l’eau aux agriculteurs*, 2024.

Occitanie is also one of 300 European regions participating in the EU Mission on Climate Adaptation under Horizon Europe⁴⁶. This programme helps regions experiment with new solutions so that, when successful, they can be replicated and scaled up across Europe. For example, the [Dryad](#) project addresses climate adaptation, in particular, droughts and wildfires through nature-based solutions across eight different regions.⁴⁷

The regional level presents a key shortcoming: there is little transparency or publicly available information on which concrete projects the Occitanie Region funds for flood prevention or drought management. The region could play a stronger role in centralising information and showcasing successful initiatives to enable replication and scaling across territories.

2.4. Local Level⁴⁸

Luchon

First, on communication of risks to the public, two tools exist, the DDRM and the DICRIM :

- The Prefecture develops the Departmental File on Major Risks (*Dossier Départemental sur les Risques Majeurs*, DDRM), a comprehensive document listing all natural and technological risks present in the territory, including floods, landslides, avalanches, earthquakes, forest fires, meteorological hazards, industrial accidents, dam failures, the transport of hazardous materials, nuclear incidents, terrorist threats, and radon exposure.
- Municipalities publish a Municipal Information Document on Major Risks (*Document d'Information Communal sur les Risques Majeurs*, DICRIM). This document is designed to inform all residents and visitors on the natural and technological risks affecting the commune. It also provides safety instructions and response guidelines in case of an incident.

Second, several prevention plans are in place:

At the major river-basin level, Luchon falls under the Adour-Garonne Flood Risk Management Plan (PGRI 2022–2027)⁴⁹, a basin-wide strategy coordinated by the Basin Prefect. It sets priorities to answer to identified risks (for instance, reducing exposure, improving alert systems, promoting nature-based solutions) and specifies which actions are carried out by the State and by local authorities.

At intercommunal level, the Community of Municipalities of the Upper Garonne Pyrenees, to which Luchon is attached, was the first territory in France to be officially labelled under the national STePRiM framework. The STePRiM initiative, launched by

⁴⁶ The Adaptation Mission receives €370M (2021–2023) from Horizon Europe to pilot climate resilience solutions, aiming to leverage further funding, [DG CLIMA, 7 March 2023](#).

⁴⁷ Dryad – [EU Missions Mission Projects Catalogue, p. 43, 2025](#).

⁴⁸ Information from *Comment s'informer sur le risque inondation en Haute-Garonne*, [Risques-Inondations 31](#).

⁴⁹ DREAL Occitanie, [Plan de Gestion des Risques d'Inondation 2022–2027 – Bassin Adour-Garonne, 2022](#).

the French State and the Region of Occitanie, supports mountain areas in developing comprehensive strategies to manage natural hazards such as torrential floods, rockfalls, avalanches, and landslides. However, it remains unclear what the torrential flood plan concretely entails, due to the limited information available.

Another option would be to join a PAPI, a coordinated framework that enables neighbouring municipalities within the same river basin to jointly implement flood prevention projects. PAPIs are contractual programmes between the State and local authorities, allowing participating areas to receive State (and regional) funding for prevention works. They can only be developed within an Area of Significant Flood Risk (TRI, *Territoire à Risque Important d'Inondation*), designated by the State based on factors such as population density and potential economic damage. Each TRI adopts a Local Flood Risk Management Strategy (SLGRI, *Stratégie Locale de Gestion du Risque d'Inondation*), which sets local priorities, while the PAPI translates these into concrete, operational actions.

At the municipal level, any municipality exposed to natural risks must have a Prevention Plan for Natural Risks (PPR, *Plan de Prévention des Risques*). This is a regulatory planning tool established by the State to reduce the vulnerability of people and property. Each PPR is developed in coordination with the local authority and adapted to the specific risks faced by the municipality. Luchon has a PPR, but it is not accessible online.

A key actor in flood prevention, the Mixed Syndicate of the Upper Garonne (SMGA, *Syndicat Mixte de la Garonne Amont*), has held the GEMAPI competence for flood prevention and aquatic environment management in the Upper Garonne since 2019. Its territorial scope already covers a large part of the Upper Garonne basin, spanning two departments, four *communautés de communes*, 173 communes, and 87,000 inhabitants. The SMGA focuses its activities on river and riverbank maintenance, sediment management, and ecological restoration across the Upper Garonne basin. It also reports on the condition of dikes and dams and on related works, although it is not directly responsible for their management. Over time, however, the SMGA's approach has evolved: recent activity reports (2022–2024) show an increasing emphasis on community engagement, including public meetings to present ongoing studies and flood prevention works, school and citizen awareness campaigns, and participation in the National Resilience Day. The Upper Garonne, where Luchon is located, is not currently covered by a PAPI but the SMGA is conducting a feasibility study to create a PAPI for the Upper Garonne, in order to improve coordination and access to regional and national funding for flood prevention projects.

Third, regarding public consultation, municipalities with a Flood Risk Prevention Plan (PPRI, *Plan de Prévention des Risques d'Inondation*), equivalent to a PPRN, are required to organise a public meeting at least once every two years. These meetings must present local risk characteristics, prevention and protection measures, alert protocols, recommendations from the PPRI, and any additional measures taken by the municipality.

In case of flooding, the municipality activates its Municipal Safeguard Plan (PCS, *Plan Communal de Sauvegarde*) to protect residents and coordinate relief. This plan defines major local risks, safety measures, vulnerable groups, alert procedures, and emergency resources.

Several gaps can be identified at the local level:

1. In the DDRM for Haute-Garonne, the Prefect emphasises that although protecting citizens is a key responsibility of public authorities, citizens remain the first actors in their own safety. Therefore, a shared risk culture is essential to develop reflexes in case of danger, and to foster active civic engagement (being trained in emergency procedures, becoming a volunteer firefighter, or joining the communal civil protection reserve). While these principles are valid, public authorities are failing in their duty to effectively inform and train the population.

The DDRM is largely unknown to the general public, and its dissemination should be significantly strengthened and made more accessible. In addition, the DDRM states that citizens must proactively seek training or join volunteer relief services. First-aid training is available in the department (for €65), but there is no training specifically dedicated to flood prevention.

2. In the case of Luchon, the DICRIM mentions the existence of a PPR (Risk Prevention Plan), but the document itself is not accessible online, only upon request at the municipality office, which seriously limits public access to essential information on local prevention measures.
3. Holding a public meeting only once every two years, as required by current regulations for municipalities with a PPR, is insufficient to truly raise awareness among local populations. More frequent meetings, as well as the development of accessible training tools for residents, are necessary to make a real impact.
4. There is a complete absence of participatory approaches: none of these flood prevention plans have been developed in consultation with the population, as required by the Climate and Resilience Law and the participatory objectives set out in the PNACC.
5. There is a lack of clarity regarding how the different prevention plans interact, particularly between the intercommunal STePRiM and the municipal PPR. The SMGA's ongoing effort to establish a PAPI may further blur responsibilities unless coordination mechanisms are clearly defined. It also remains uncertain whether STePRiM-labelled territories can access the same State or regional funding as PAPI programmes.
6. It remains unclear what would actually happen in the event of a flood, whether and how populations would be warned in advance, what alert systems would be used, and which emergency procedures would be activated. This

uncertainty largely stems from the fact that such information is not publicly available. Indeed neither the Municipal Safeguard Plan (PCS) nor the Civil Security Response Plan (ORSEC, *Organisation de la Réponse de Sécurité Civile*), coordinated by the Prefect, are public. This constitutes a major shortcoming in risk communication and public preparedness.

Caramany

On communication of risks, two tools exist.

The Prefecture has published a Departmental File on Major Risks (DDRM) for the Pyrénées-Orientales, which includes the commune of Caramany.⁵⁰ The document describes wildfire risks and briefly summarises preventive measures and rules in place. It also notes that certain communes have a Forest Fire Risk Prevention Plan (PPRIF, or *Plan de Prévention des Risques d'Incendies de Forêts*), but Caramany does not, although such a plan would be increasingly relevant.

Surprisingly, while the DDRM lists numerous risks, including those linked to climate change, it does not address droughts, even though water scarcity is one of the most pressing issues for Caramany.

The same limitation appears in the Municipal Information Document on Major Risks (DICRIM) of Caramany: it identifies various hazards such as floods, landslides, and fires, but omits droughts altogether. The municipality's website only relays the prefectural decrees on water-use restrictions, without offering further guidance or communication to residents.

On water management, the Water Plan (*Plan Eau*) mentioned above is a central policy framework. It was defined by the Ministry for Ecological Transition and is implemented by several actors, including the Prefect, the Water Agency at river-basin level (*Rhône–Mediterranean–Corsica*), the Mixed Syndicate for the Agly River Basin (SMBVA, *Syndicat Mixte du Bassin Versant de l'Agly*), which operates at the smaller sub-basin level where Caramany is located, and local authorities.

There are therefore clear gaps at local level:

1. Neither the DDRM nor the DICRIM address drought risks or provide measures to inform, support, or educate the population on how to respond to prolonged water scarcity. Local capacity constraints likely explain this limited action, as Caramany is a very small commune with modest administrative and technical resources.
2. Regarding drought management, the Water Plan sets out a strategy to combat droughts in the Eastern Pyrenees, with defined objectives and action items. However, there is little clarity on who is responsible for implementing these

⁵⁰ [DDRM Pyrénées-Orientales](#), Préfecture des Pyrénées-Orientales, 2024.

measures and how coordination will occur in practice. The Water Agency is expected to play a key role in rolling out the plan, but its operational involvement at the local level remains uncertain.

Part 3 - Qualitative Interviews And Recommendations For Inclusive Climate Resilience

To ensure that local realities and youth perspectives are meaningfully reflected in the analysis, a series of qualitative interviews was conducted with young residents of Luchon and Caramany. These conversations explored how individuals experience and perceive climate-related challenges such as wildfires, droughts, and floods, as well as the economic repercussions for mountain-based professions, including ski station employees, paragliders, farmers, vineyard workers, and young parents balancing childcare with seasonal work. The aim of this qualitative approach is to identify concrete gaps in local resilience and to provide evidence-based insights that will inform policy recommendations for more inclusive and adaptive climate governance.

3.1. Luchon

1. How did you experience the 2013 flood and how did it impact your personal or professional life?

Impacts ranged from devastating to negligible. Valentin (31) recalled how the sudden flood inundated his garden and garage, destroying personal belongings and a motorcycle, and forcing him to miss work in order to clear and empty the space. Thomas (31) recounted that his parents' house was submerged by more than a metre of water, causing extensive material damage; since then, he noted, many residents live with recurring doubt and fear each spring during the snowmelt. For Jean-Louis (36), living on higher ground meant no direct losses, though he witnessed the disruption experienced by others.

2. What was most lacking from public authorities?

The absence of anticipation and weak communication emerged as recurring themes. Jean-Louis (36) emphasised that there was no anticipation of the risks, emergency services were overwhelmed, nobody was warned of what was coming, leaving citizens to improvise. Thomas (31) recalled that there had been a lack of communication and information from public authorities about a potential rise in water levels. Still, this was predictable, as a major storm had been forecast for that day; combined with snowmelt in the mountains, the water level quickly rose. Valentin (31) expressed frustration over the lack of anticipation from public authorities who should have built preventive infrastructure such as dikes and, over the absence of support or financial compensation. Charlie (30) pointed to insufficient financial support, from the Occitanie region for example, for rebuilding damaged infrastructure such as the casino for example.

3. What concrete measures should be put in place?

Jean-Louis (36) recommended installing water-level sensors, developing hydrological forecasting and alert systems, and organising annual evacuation drills with sirens in

sensitive areas. Valentin (31) called for the establishment of SMS and siren alerts, a complete redesign of ditches along watercourses to prevent future overflows, and the construction of dikes in the most critical areas. Charlie (30) suggested reinforcing the riverbanks of the Pique and the One rivers and carrying out regular water releases from mountain lakes during years of heavy snowfall. Alice (31) emphasised the need for clear public information leaflets, the creation of park areas with permeable soils capable of absorbing the overflow, and the development of water diversion infrastructure. Thomas (31) proposed installing alert systems in all houses located along rivers that may again be affected by floods, and lowering the water levels of mountain lakes equipped with dams as a preventive measure during the spring snowmelt.

4. Do you feel listened to and involved in decisions for the future?

The prevailing sentiment is one of exclusion from decision-making. Jean-Louis (36) expressed that he does not feel listened to or involved, suggesting public meetings and awareness initiatives to raise collective understanding. Valentin (31) does not feel heard at all nor involved. He emphasised the need for an independent citizens' committee to provide non-partisan input on local climate and ecology decisions. Thomas (31) believed that local NGOs could motivate young people from the valleys affected by these climate events. Alice (31) suggested that the municipality should have a dedicated budget and political programme to address climate change. Marie (36) stated that what would encourage her to participate are concrete workshops on this topic, combining information, reflection, and practice, noting that "saying is good, doing is better."

3.2. Caramany

1. How do you experience drought and water restrictions, and how does it affect your personal or professional life?

Young people reported a combination of personal anxiety, everyday adjustments, and professional uncertainty. Marion (32) described how, even without a garden, drought shapes her routines: she reuses dishwater, teaches her daughter about the value of water, and observes growing tensions in her village over the use of the local spring, with acts of sabotage marking the first signs of a "war of water." She also notes there is growing anxiety with the threat of wildfires. Julia (36) and her husband, who is a winemaker, fear they may be forced to leave if the drought persists. Maintaining a vegetable garden with the water restrictions has become nearly impossible. They monitor and measure rainfall closely, regularly check river levels, and remain extremely cautious about water use at home. Jeanne (33), also a farmer, voiced deep concern about the long-term viability of her profession over the next 10 to 20 years. Aude (34) is careful to limit water consumption both personally and in her vegetable garden, yet she insists on watering the trees she has planted, believing that using water to help them grow is an essential investment for the future. Thomas (34) expressed strong anxiety about the department's future in the face of worsening drought conditions.

2. What was most lacking from public authorities?

Respondents expressed clear dissatisfaction with the adequacy of institutional

responses. Marion (32) lamented the absence of concrete action from public authorities and the slow development of a collective awareness regarding the severity of the drought. Julia (36) denounced contradictory restrictions such as bans on watering trees, which are essential for providing shade during heatwaves. Both citizens and municipalities suffer from such measures, which, she argued, reveal a lack of climate and ecological understanding among decision-makers. Water is treated as a consumer good rather than as an essential element of the natural cycle and of life itself. She also criticised the EU-backed vineyard uprooting schemes as a consequence of the drought, which left thousands of hectares barren, with no plans for ecosystem restoration, soil preservation, or replanting. There is, she noted, a striking absence of projects aimed at preserving water resources and supporting farmers in maintaining healthy soils. Jeanne (33) emphasised the urgent need for financial support for the ASA, the citizen-led local association managing the aging irrigation canals. Thomas (34) pointed to an overall lack of investment in climate adaptation, while Aude (34) called for greater public investment in collective water management, including subsidies for household rainwater collectors and long-term strategies to secure local water supply.

3. What concrete measures should be put in place?

Marion (32) proposed local wastewater recycling with algae-based filtration and mandatory rainwater collectors in every village to maintain green areas and public spaces. She called for environmental education from kindergarten, pollution clean-up of rivers and lakes, and the reduction of agricultural and viticultural chemical pollutants. Marion emphasised community engagement through “water festivals” and the planting of drought-resistant species such as succulents and cacti. She also proposed financial support for drip irrigation, oyas (buried clay pots for slow water diffusion), and shared cisterns in community gardens, while urging practical protection measures for farmers and winegrowers to ensure viable, secure alternatives in a changing climate. Julia (36) highlighted the need to adapt agriculture, curb tourist pressure during peak dry months, and create public pools to limit private water use, while also calling for technologies to capture dew and reduce soil evaporation. Jeanne (33) argued that regenerative agriculture is essential for soil preservation. Aude (34) pressed for household-level rainwater recovery, durable solutions for water distribution, and an end to wasteful practices such as golf course irrigation, and Thomas (34) demanded more efficient water management.

4. Do you feel listened to and involved in decisions for the future? What would help your participation?

Most participants felt excluded from local decision-making on climate and water issues. Marion (32) noted that residents’ views are not consulted and that no structured mechanisms exist to involve citizens. She suggested public discussions at municipal level to raise awareness and co-develop locally adapted solutions. She asks for radical measures to change education in schools. Julia (36) also observed that few or no institutions engage the population on topics of drought and adaptation, adding that local action groups would be better placed to address such challenges. Thomas (34) shared a similar view, highlighting the need for better communication about opportunities for participation.

Part 4 - Recommendations

Building on a bottom-up approach, the following recommendations can be listed, organised under governance, flood prevention, and droughts:

Governance & Participation

- Create citizen committees on ecology and climate decisions at the local level in Luchon and Caramany.
- Hold regular municipal meetings to co-design local climate actions.
- Integrate climate and water education from kindergarten to adulthood.
- Support local NGOs engaging youth in climate initiatives.
- Organise water festivals, awareness events, and practical workshops on floods and droughts.

Floods

- Include Luchon and the Pique Valley in the Vigicrues prediction system as soon as possible.
- Improve communication with the public through SMS and e-mail alerts and proactive risk communication as soon as threats are identified.
- Provide clear, accessible information on flood risks and safety measures through greater transparency, publication of data, and active dissemination.
- Organise regular drills, and install sirens and alert systems in risk areas near rivers.
- Preventively empty mountain lakes after heavy snowfall.
- Redesign ditches and restore the riverbanks of the Pique and the One.
- Ensure stronger public financial support after floods, notably from the Region and the State.

Drought

- Adapt water restrictions to climate needs (e.g., allow tree watering).

- Support the Caramany citizens' water association in renovating and maintaining irrigation canals.
- Promote and support household rainwater and grey-water collection systems.
- Encourage the planting of drought-resistant species.
- Link EU vineyard-uprooting aid to soil restoration and replanting projects.

Part 5 - Focus On The Situation In Kibera

Floods and their Impact

In April 2024, Kibera was struck by one of the most devastating floods in recent memory. Torrential rains caused the Ngong River to burst its banks, sweeping away homes and belongings, destroying small businesses, and contaminating scarce water supplies with sewage and industrial waste. Thousands were displaced overnight. Schools and community centers were forced to close, while outbreaks of waterborne diseases such as cholera and typhoid multiplied in the aftermath. The disaster highlighted the settlement's chronic exposure to floods, made worse by clogged drains, poor infrastructure, and unregulated industrial pollution along the riverbanks.

Impact on Youth

Youth, who make up more than 60% of Kibera's population, bore the brunt of the disaster. Students missed weeks of schooling due to damaged classrooms and impassable roads. Young entrepreneurs and casual workers lost their income as small-scale shops and workshops were destroyed. Many were forced to take on unsafe or exploitative work to support their families. Beyond material losses, the floods left a heavy psychological toll: young people described fear of future rains, trauma from repeated displacement, and anxiety about an uncertain future in a settlement where basic services are unreliable. Despite these hardships, Kibera's youth also mobilised in remarkable ways, clearing debris, opening their homes to neighbours, and setting up informal early warning and relief networks.

Policy Gaps

Kenya has developed progressive national and county-level climate policies, including the National Climate Change Action Plan (NCCAP) and the Nairobi City County Climate Change Act (2021). However, these frameworks rarely translate into protection for Kibera's residents. Climate budgeting is often directed toward infrastructure projects in central Nairobi, while informal settlements are sidelined. Flood prevention measures such as drainage upgrades or rainwater harvesting systems are either underfunded or not implemented at all. Youth-led initiatives, such as proposals for localised rainwater collection or community-designed drainage

solutions, are routinely dismissed as too small or “unscalable,” despite their clear relevance. The 2024 floods demonstrated the consequences of this implementation gap: policies exist on paper, but they do not safeguard the communities most exposed to climate risks.

Exclusion of Youth

Another recurring problem is the systematic exclusion of youth from climate governance. Young people in Kibera are rarely invited to decision-making spaces, and when they are, it is often in tokenistic ways with no real influence on outcomes. Funding structures, whether international or national, remain inaccessible: requirements for complex proposals, audited accounts, or high-capacity reporting exclude grassroots youth organisations like Maida CBO. This results in a double injustice, youth are the most affected by climate disasters and often the first responders, yet they are sidelined from shaping policies and denied access to resources that could scale their solutions.

What Should Be Done

To address these failures, youth in Kibera call for community-based Climate Resilience Hubs, a County Youth Climate Fund with simplified access, and mandatory youth representation (at least 30%) in climate committees. They also stress the need to integrate youth into early warning systems, using their networks to spread alerts and coordinate evacuations. Finally, cross-continental exchange with peers in the Pyrenees offers a powerful way to share strategies on water resilience and to build a joint advocacy voice at AU-EU level.

FOR FURTHER INFORMATION OR SUPPORT PLEASE CONTACT:

Contact: roman.mauroschat@petite-graine.org

Prepared by: Roman Mauroschat, Association Petite Graine (France)

Learn more about Voices Unheard: From Pyrenees to Kibera on [LinkedIn](#), [Instagram](#), and [TikTok](#)