

## HIGHLIGHTING UCC'S FALL VARSITY SPORTS

NICHOLAS JIRSCH, ANDRE CANTO CUBAS, ELIJAH PEARSON

SENIOR EDITOR, JUNIOR EDITOR, STAFF REPORTER

At UCC, we are fortunate to have 19 varsity-level sport teams. As part of Convergence's focus on school sports, our staff interviewed the captains of six of those teams to hear what they had to say about their seasons so far.

### Varsity Cross Country - Hudson Cadeau and Porter Riopelle



Could you describe your season so far in 3–4 sentences?

This season has been quite hard. That being said, our boys stuck with it, pushing through the pain. Our team did well at CISAA, with 15 guys from Years 9-12 heading to OFSAA.

# As the captain of a varsity sport team, what have you learned about leadership? For any reader who is an aspiring leader at UCC, what advice would you give?

As a captain, I have learned the importance of commitment and leading by example. For anyone aspiring to be a leader, I would say the best way to lead is get to know as many guys as you can and set an example.

### If you could describe your team in three words, what would they be?

Commitment, Discipline, Speed.



#### Varsity Football - Hudson Vandermeer



### Could you describe your season in 3-4 sentences?

We started off a little slow, facing two of the best teams in the province in Catholic Central Highschool and Frontenac Secondary School in controlled scrimmages, but it gave us a chance to hone our skills and raise our standards. We steamrolled through Brooklin and Bill Crothers on A-day and received our first real challenge at SAC's homecoming, where we would lose by quite a large margin. Then came our trip to Montreal to play Selwyn, followed by two consecutive games against Selwyn, both which were hard fought but we went 3-0. Our ability to adapt, by watching film and making in-game adjustments really allowed us to win those games and served us well going into the CISAA final against SAC. Even though the game didn't turn out how we wanted it to, I think we can all say that we gave it our all and left everything out on the field. The game was extremely close and could've been ours if luck had been on our side.

## What was the biggest highlight or turning point of your season? Is there anything you've learned from it as a leader?

I think a big highlight for the team was the win on A-Day, coming off a big loss last year we really wanted to show out against Bill Crothers, and show out we did. The pick-six by Max Zumbo (on A-day) and Danny Devine's jukes were definite highlights of our season. The long bus rides and specifically the trip to Montreal were also big highlights amongst the team. Getting to play at Percival Molson Memorial Stadium (where the CFL team Montreal Alouettes and McGill plays) and at Richardson Memorial Stadium (where QueensU plays) was cool.



What were the main goals or ambitions for your team this year?

I think our main goal this year was obviously to win the CISAA championship. But our focus, other than winning, was always on how we could get better everyday, whether as a team or as an individual. The coaches always reiterated how important the first 5-10 minutes before practice were ('pre-practice' we call it). They said that it was the time where you can work on things such as your hands, footwork, snaps and cadence/timing. Getting those extra reps was always something we took pride in as a team and over the course of the year it showed on the film and in the game.

### If you could describe your team this year in three words, what would they be?

Resilient, Determined, Brotherhood.

#### Varsity Volleyball - Jackson Lang



Could you describe your season in 3-4 sentences?

From the beginning of the season, our team meshed together really well, and I think everyone genuinely enjoys playing with each other. We've had a strong season.

## HIGHLIGHTING UCC'S FALL VARSITY SPORTS

## What was the biggest highlight or turning point of your season so far? Is there anything you've learned from it as a leader?

Our biggest highlight was the tournament at William Lyon Mackenzie King High School, which had many of the top teams in Ontario. We fought through the entire day without our starting setter, with Daniel Ding stepping up and starting all day. We pushed all the way to the semi-finals, where we battled the home team and eventual champions in front of their whole school. We won the first set convincingly, lost the second 30–28 in a thriller, and dropped the third 15–13. Even though we fell just short, it was one of the most fun matches we've played thanks to the atmosphere and the fact that you could tell everyone really wanted it.

### Who's a teammate or coach on your team that's stepped up this year?

A teammate who's really stepped up is Artun Arat. As a rookie, he quickly earned a spot as a starting left side. His serve is nearly unstoppable when it's on, and beyond his skill, he brings the most energy to the court, which lifts the whole team in big moments.

# As the captain of a varsity sport team, what have you learned about leadership? For any reader who is an aspiring leader at UCC, what advice would you give?

I've learned that leadership is less about big speeches and more about consistency. Setting the tone in practice, keeping focus in games, and holding myself accountable makes it easier for everyone else to do the same. It's about leading by example and with empathy rather than trying to do everything yourself.



#### **Varsity Soccer - Laurence Fiorini**



### Could you describe your season in 3-4 sentences?

The Varsity Soccer Team's season contained a mix of resilience, growth and true competitive spirit. Even when calls or results didn't go our way, every member of the team was dedicated to improve and better themselves every week. Over the short 2-3 month season, it was evident that we collectively developed stronger team chemistry, learned to trust one another more, and elevated our standard of play.

#### What was the biggest highlight or turning point of your season? Is there anything you've learned from it as a leader?

Both the biggest highlight and turning point of our season came in our final group play match against SAC, where a draw or win would put us through into the semi finals of CAIS. Previously we had played SAC at their homecoming in a game where not much was going our way, but we were quick to put that result behind us and focused on leaving everything we had on the field in this rematch. Although we ended up narrowly losing I-O in a game where a penalty was scored by SAC and a last-ditch effort goal by us was disallowed, we returned back to league and playoff play with a different mindset and level of confidence in our ability to work together as a team.

#### As the captain of a varsity sport team, what have you learned about leadership? What advice would you give to an aspiring leader at UCC?

As captain of the Varsity Soccer team, I was quick to learn that leadership is less about being vocal and more about setting an example: through consistent effort, a positive attitude, and how you respond to challenging setbacks.



It's also about listening and supporting teammates, and creating an environment where everyone feels heard and has a common goal. For an aspiring leader at UCC, my advice is simple: be someone others can rely on, stay humble, and put the team first in everything you do. The respect you earn will come from your actions long before your words.

#### Varsity Tennis - Pierce Metcalfe



### Could you describe your season so far in 3 - 4 sentences?

We've had a great season so far. In September, we held intersquad matches to decide who would compete at OFSAA qualifiers. Noah Rizvi and Alex Kulakov represented us in singles, while Pierce M/Toby P and Aaron W/Josh L played doubles. Noah R and Aaron W/Josh L qualified for OFSAA, massive congrats to them. We're aiming for our fifth straight CISAA title in spring 2026.

#### What's been the biggest highlight or turning point of your season so far? Is there anything you've learned from it?

The biggest turning point of our season was when Santiago Ramirez, one of our star players, arrived in Canada after facing visa issues in September and October. His return is huge for us, and he's set to make a major impact on the team this coming season.

## HIGHLIGHTING UCC'S FALL VARSITY SPORTS



How has the support from the UCC community impacted the team? Is there anything in particular you're looking for from the UCC community in the final few weeks of your season?

We've had a lot of support from the UCC community this year. We're grateful for everyone who has come out to cheer on the team. As we wrap up our fall season, it would be great if members of the UCC community wished Aaron Wang, Joshua Liu, and Noah Rizvi congratulations for qualifying for OFSAA.

Who's a teammate or coach on your team that's stepped up or made a difference for you this year?

Alexander Kulakov, a Grade 9 student, did a fantastic job by winning our intersquad play to earn one of our OFSAA qualifiers singles spots. He has shown strong leadership as one of the youngest members of the team. Mr. Weiser has also been an outstanding head coach, organizing intersquad matches for OFSAA qualifiers, attending OFSAA qualifiers, and being supportive throughout the season.

Varsity Rowing - AJ Edwards and Wyatt Porter



Could you describe your season so far in 3–4 sentences?

Could you describe your season so far in 3–4 sentences?

This season has been one of the most competitive and rewarding yet. We've built on last year's success, placing second at Head of the Trent and finishing 14th out of 85 crews in the U19 4+ at the Head of the Charles, which was the fastest UCC time ever recorded there. The team has shown huge progress across every lineup, and there's a strong sense of momentum heading into winter training and the spring season.

As the captain of a varsity sport team, what have you learned about leadership? For any reader who is an aspiring leader at UCC, what advice would you give?

I've learned that leadership is about setting the standard through consistency and effort every single day. The best way to earn respect is by showing up, working hard, and caring about your teammates. My advice to future leaders would be to listen first, support everyone on the team, and remember that good leadership comes from example, not position.

If you could describe your team in three words, what would they be?

Driven. Principled. Relentless.









## BEHIND THE SCENES IN UCC DEBATE CLUB

**WILLIAM ZHOU**STAFF REPORTER

UCC's Debate Club has long been recognized as one of the school's most competitive and intellectually rigorous clubs, attracting students passionate about public speaking, critical thinking, and argumentation. This year, the club is led by Michael Peng, who has made history as one of two Team Canada members in the club, a first in UCC's history. I sat down with him to discuss his journey in debate, his leadership approach, and his vision for the club's future.

Michael's debate journey began far from Upper Canada College. "My initial debate experience came in Grade 6, when I was still in international school in China," he recalled. "I was part of a local debate club near my school, and I could barely give a speech above a minute." It was a humble beginning that would eventually lead to representing UCC at the highest levels of competition.

When asked about his most memorable moments in debate, Michael's answer revealed what truly matters to him beyond trophies and titles. "The moments that stood out most for me were the times I spent with friends," he said. "My favourite memories are dinners, jokes, and laughs with friends." It's a reminder that while debate is competitive, the relationships built along the way are equally and especially valuable.

Being on Team Canada is not a small feat, and Michael is part of a historic milestone, the first year UCC's Debate Club has two TC members at the same time. So what did it take? "The steps I took to achieve this position were to work hard and practice meaningfully," Michael explained. "It's not just enough to practice over and over again, but to determine areas that need work and to improve upon them proactively." He was also quick to acknowledge those who helped him along the way, mentioning several mentors from past years: Justin Z '23, Jerry Z '25, Andy Y '25, and Dennis L '25, just to name a few.



Debate Club Co-Heads Keerti Joshi and Michael Peng

"Other people helped contribute to this position," he emphasized, showing his appreciation for the mentors, friends, community and the school that supported his growth and journey in debate.

Now in the leadership role himself, Michael has found fulfillment in paying that mentorship forward. "A lot of the experience has really come in helping mentor newer students like other people in past years did for me," he shared. "Being a person that others can look up to, and giving meaningful advice so others can improve." It's clear that he takes seriously the responsibility of being a role model, just as his predecessors were for him. Looking ahead to this year's goals, Michael aims to strike a balance between enjoyment and excellence for new members.

"I hope to provide an experience at the club that both brings joy and happiness, but also an environment with healthy competition and a drive to succeed," he said.

As the Debate Club moves through another competitive season under Michael's leadership, members can expect both rigorous preparation and a supportive community. From a nervous Grade 6 student who could barely speak for a minute to a Team Canada level debater and club head, Michael Peng's journey exemplifies the growth that dedication, meaningful practice, and strong mentorship can achieve. And now, he's helping the next generation of UCC debaters write their own success stories.

## **INSIDE UCC DECA: A CONVERSATION WITH DEREK GU**

ALEXANDER ZHANG
JUNIOR EDITOR

UCC's DECA Club has been one of the school's biggest and most competitive clubs, drawing many students interested in business and leadership. This year, the club is led by Derek Gu, who is also this year's Wellbeing Steward. I sat down with him to learn more about what motivates him, how the club operates, and what members can look forward to this season.

Behind the scenes, DECA meetings are carefully planned by Derek and the executive team. Each session typically involves a slideshow covering key competition information, instructions, or case-writing tips. After meetings, the execs follow up with a detailed email to the entire club summarizing what was covered—helpful for anyone who might have missed the session or needs a refresher. "Nothing too crazy," Derek said, "but everything is prepared intentionally so members always know what's going on."

When asked about his most memorable DECA moments, Derek shared two highlights. His first came in Grade 10, when he qualified for ICDC, DECA's international competition. "I wasn't able to attend the award ceremony, but I got a call from my partner saying we made it, and I don't think I've felt many better feelings in my life." More recently, since he isn't competing this year, Derek says his favourite moment has been running his first meeting as president. "It was an exhilarating feeling walking into the room with a hundred kids—except this time, I was the one in charge."

Supporting newcomers is another priority for the club. Derek remembers feeling intimidated back in Grade 9, especially at the thought of competing for the first time. That's why he works hard to maintain a welcoming, upbeat atmosphere. "Talking with energy, interacting with members, helping them feel comfortable—it all matters," he said. DECA also offers one-on-one training for anyone seeking extra support, giving new members a chance to practice cases and build confidence before regionals.

Looking ahead, the team has ambitious goals for the season. With regionals quickly approaching on the 29th, the exec team is focused on training members and preparing them for high-pressure case environments. "We're trying to get the most people in UCC DECA history qualified for provincials," Derek said, an ambitious target, but one he believes the club can reach.

Beyond DECA itself, the club is also hoping to launch a new **Grade 8 in-club business case competition**. Since Grade 8 students aren't yet eligible for DECA, the initiative aims to introduce them to business concepts early and help them feel included. "We want them to be prepared and confident so they can flourish in the future," Derek explained.

With strong leadership, careful planning, and a renewed focus on mentorship, UCC DECA is shaping up for an exciting and competitive year ahead.

Photos by UCC DECA Club











## ROBOTICS: BUILDING COMMUNITY WITH ENGINEERING

**ALEXANDER ZHANG**JUNIOR EDITOR

Johnathan Lee is the head of the school VEX Robotics Club, one of the fastest-growing STEM clubs at our school. With competition season beginning and new members joining each week, I sat down with him to talk about the club's culture, challenges, and vision for the year.

We first discussed his experience being a part of and now leading the robotics club. He noted that "back then, the club only had 5-ish members" and Mr. Miskew set him up with some Grade IIs. This early mentorship, he said, played a big role in shaping his experience and interest in robotics. What started as just a small after-school club has now grown into a full team with multiple subteams, specialized roles, and a much larger presence in the school community.

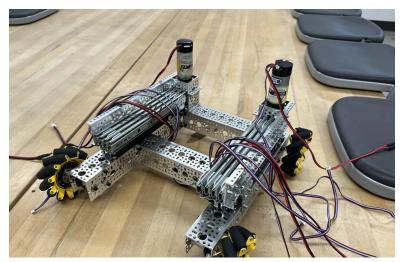
We then talked about what occurs during meetings. According to Johnathan, at the start of the year, members of the club are split into teams based on their skill, grade level and experience with robotics. These teams work on different aspects of robotics such as designing, building, and coding. Johnathan emphasized that this setup helps everyone contribute meaningfully while still learning new skills along the way. Beginners get to learn with people of similar skill level while trying different roles, while more advanced members take on leadership responsibilities within each of their subteams.

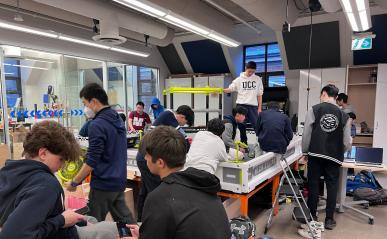
Meetings usually occur everyday after school in the design lab where you come whenever you are available. This flexible schedule, Johnathan explained, keeps the environment productive but low-pressure making it suitable for anyone regardless of your commitment level. People come in, collaborate with their team, pick up where they left off, and make steady progress throughout the season.

When I asked him about memorable moments being part of the robotics club, he immediately mentioned "just getting to bond with the teammates; some of my best friends are on the team as well". For him, robotics isn't only about competitions or engineering challenges, but also about the friendships formed building and testing of robots between subteams during long hours after school in the design lab. He noted that the sense of collaboration and shared problem-solving is what keeps many members coming back.

As for what they are working on this year, the robotics team has a lot more competitions in store. They are hoping to go to Provincials in April and other reputable competitions across different schools. Johnathan is hopeful that with the club's growth and renewed energy, this season will be one of their strongest yet. He hopes this season will not only be one of their most competitive, but also one of the most rewarding for everyone involved.

Photos by UCC Robotics









## **ROCKETRY CLUB SPOTLIGHT**

ELIJAH PEARSON & SAM ZAMBONINI STAFF REPORTERS

As the new school year begins, there's always new or interesting clubs popping up. This year a new and exciting club, the Rocketry Club, has been started by Sean Li and David Wang in Year II. The club is ambitious and unique among our current clubs, so we asked David about his goals and ambitions in the club this year.

### What inspired you to start the Rocketry Club at our school?

Rocketry is something I've always found incredibly exciting and full of potential. While I may not have extensive experience yet, I've assembled a strong team of peers who bring valuable knowledge and hands-on expertise to the foundation of our club. Combined with my experience in Robotics last year, I recognized that our school could benefit from more competitive STEM opportunities. Rocketry perfectly fits that vision; it challenges us to apply science, engineering, and teamwork in a thrilling, results-driven way that pushes our skills and curiosity to new heights.

### What's a challenge you foresee in running the club?

A big challenge I see in the future of the club is sustaining the interest of the club; it is to my knowledge that we did have a rocketry club a few years ago, and somehow it did not carry on to now. It feels like reaching a self-sustaining club that can keep running even after we as co-heads and all the other Year IIs and I2s in the club graduate. This is something that we are still thinking about and have no concrete solution for. On the other hand, we do feel optimistic about this since we have seen a lot of interest from the younger grades.

#### What are the main goals of the Rocketry Club this year?

The main goals of the Rocketry Club this year are to set up the club into a running community where there are real roles and responsibilities for members. By the end of the year, I hope to have multiple launchable rockets for next year and a team of responsible leaders to guide the club's growth.

### How do you hope this club will inspire or benefit students?

I hope that this club will inspire other students to do things they might first think are too complicated or too much work. Rocketry is a lot of work to say the least, but I hope that in the making of the rocket, students can realise that every step they take is worth it and will show a positive impact, maybe not instantly, but in the future for sure.

## What makes this club different from other science or engineering clubs at the school?

What makes this club different from other science clubs or engineering clubs is that we will actively launch rockets and test products. In a sense, it is similar to robotics, but instead of building robots, we are creating rockets that can go hundreds of meters into the sky. It's different from a science club because you would get a much more hands-on experience with the rocket. We will do theory and simulations for the rocket, but most of the time will be spent on the actual creation of the rocket.

### Are there any larger competitions or events you plan to participate in?

There is a large event called "Launch Canada", which is an annual rocketry competition that is usually designed for university clubs, but I feel that in a year or two, we should be able to attend these competitions. This event is our end goal for the club, but on the way, we will definitely hit a few small competitions.

### What can a new member expect when joining the club?

For new members, they can expect to first be overwhelmed by information, but then, after a week, they should be able to adjust to everything. It is a steep learning curve, but after the initial curve, every concept becomes much more interesting, and it feels like you understand everything. We should be starting to build proper rockets from scratch soon, so if a new member joins later in the year, then they can also expect to see and experience that.

### What kind of materials or equipment do you use to build your rockets?

We should be using PVC pipes and card board for most of our builds; sometimes, we may add more with resin or polyester, but that is still undecided. For equipment, you can expect us to use almost all the tools in the lab; cutting parts and attaching them is a big part of the build process.

### What are your long-term goals for the Rocketry Club?

The long-term goals of the Rocketry Club are to build a sustainable and self-sufficient team that continues to grow even after the current leaders graduate. We aim to establish a strong foundation with clear roles, structured leadership, and an active community of passionate students. Over time, we hope to develop advanced rockets capable of competing in major events such as Launch Canada and other smaller competitions along the way. Ultimately, the goal is to create a club where students gain valuable hands-on experience, explore their curiosity in STEM, and feel inspired to take on ambitious engineering challenges beyond high school.





### THAILAND LAWMAKER SENTENCED TO PRISON FOR INSULTING MONARCHY

MICHAEL PENG, HASSAN ZIA, RAAHIL KHAN GUEST REPORTERS (HUMAN RIGHTS CLUB)

On December 13, 2023, a Thai criminal court sentenced 29-year-old Rukchanok Srinork to six years in prison. Rukchanok is an opposition member of parliament, part of the Move Forward Party. She was found guilty of committing lèse-majesté and violating the Computer-Related Crimes Act. Committing lèse-majesté means defaming the royal family. The charges against Rukchanok were related to two posts she had made on the social media platform X. One post discussed the monarch's involvement in a pharmaceutical company responsible for manufacturing COVID-19 vaccines. Another was simply a repost of an anti-monarchy comment. After she had been sentenced, the court granted Rukchanok's request for bail based on 500,000 Thai baht (translating to roughly 19,200 CAD) on the condition she does not re-offend while appealing the court's decision.

Rukchanok's imprisonment gained attention from Human Rights Watch. Elaine Pearson, director of Human Rights Watch in Asia, says, "The prosecution of an opposition member of parliament for two tweets is not only an appalling violation of free expression, but sends a chilling message to other outspoken opposition party members to keep silent." Under international human rights laws, these charges against Rukchanok violate her rights to freedom and expression. Reports from Thai Lawvers for Human Rights report that since early 2020 over 1,925 people in Thailand have faced prosecution for exercising their rights of freedom and expression including many student activists. Several activists are being investigated under the lèse-majesté law and ultimately the Thai government is utilizing the Computer Crimes Act and laws such as lèse-majesté as a tool to suppress speech online conflicting with their interests and agendas. This is a blasphemous and heinous use of the Criminal Justice system that will be considered in Thailand's joining of the UN Human Rights Council. The case of Rukchanok Srinork highlights the need for international attention and action regarding the protection of freedom of expression and human rights in Thailand. Foreign governments can apply diplomatic pressure to the Thai government by advocating for the repeal of amendment laws like the lèse-majesté law which criminalizes defamation and insults towards the monarch of Thailand which has been used to silence opposition forces in the past. Additionally, repression in Thailand can mobilize public support both domestically and internationally. Civil society organizations, human rights defenders and grassroots movements can play a role in boosting the voices of those who are affected by the laws and advocating for their rights. This can involve providing legal representation, advocacy and financial support for their defense. Sustained pressure and engagement at both national and international levels are essential in challenging and addressing systemic issues that undermine freedom of expression and human rights in Thailand.

Rukchanok Srinork, convicted of violating lèse-majesté laws and the Computer-Related Crimes Act.



### **BUDGET 2025: BIG PLANS, BIG BETS, AND A BALLOONING DEFICIT**

**ANDRE CANTO CUBAS** 

JUNIOR EDITOR

PM Carney's Budget 2025 has been met with mixed reactions across the board. It focuses heavily on the long-term over the short-term and marks a change from Trudeau-era policies, with the deficit continuing to grow. The government is boasting \$25 billion in housing, \$30 billion in defense, \$115 billion in infrastructure, and \$110 billion in productivity & competitiveness spending, new agencies, cutting some regulation, and investment in AI. The government is gambling heavily on economic growth, spending cuts in the public sector, and AI in order to pay the deficit. Opening the 493-page budget shows numerous plans that the government has, with lots of numbers, jargon, and generic government talk, so here are some highlights from reading it.

#### **Differences**

The most obvious change within the budget is the difference in allocation of spending between PM Carney and Trudeau. This can be seen with a lowered bar of planting I billion trees (down from 2 billion) and an abandonment of climate goals in order to pursue gas pipelines, cuts in the public sector, and the aim to find \$44 billion in cuts in order to balance the budget. Further cuts will be supported by the adoption of AI in the government through the "Office of Digital Transformation". Where the Liberals haven't changed their stance is on social programs, which have been left alone from Trudeau. There are plenty of small wins with savings, like \$4.4 billion saved from the government reducing medicinal cannabis benefits to reflect market price.

#### **Taxes**

However, PM Carney is playing a dangerous game, getting rid of the luxury tax on yachts and planes, the digital services tax, reversing changes on the capital gains tax, his "middle class" tax cut on the lowest income tax bracket from 15% to 14% for 22 million Canadians, and ironically getting rid of the consumer carbon tax his party created.

Just the middle class tax cut will cost the government \$27 billion over 5 years, which doesn't serve much of a purpose besides easy political points.

The hope is that tax cuts and projects will stimulate the Canadian economy enough in order to pay off debts later, while aiming to pay it through cuts in the public sector over the next few years.

#### **Tariffs**

At the same time spending on major projects has increased enormously as part of the government's plan to strengthen Canada's economy in these uncertain times while moving away from the US after the introduction of tariffs from Trump. The budget discusses how Canada has the lowest tariff rates compared to other countries and 85% of goods are exempt, but there is a plan for economic independence from the US. The plan is to diversify trade, finding new trade partners, and manufacturing domestically. This is happening even as the Supreme Court of the US is deciding the legality of the tariffs as part of long term planning.

#### Housing

Housing is a big part of the budget, with the objective to double homebuilding from 280k to 430k-480k per year over the next decade. GST tax cuts have also been made for first time home buyers for homes \$1 million and under. The government seems to be appeasing the Bloc Quebecois who asked for it in Quebec in order to get their support to pass the budget.

#### **Investments**

Investments in AI and other technologies are part of the government's plan to grow the economy to pay off the debt. The aim is \$1 trillion in 'enabled investment' through more investment by the government, which is projected to reduce the deficit to manageable levels by around 2028.

Interestingly, Budget 2025 admits to short-comings from the last decade in the rapid growth of the public sector, which they want to bring to Harper era levels in relation to the population, and anemic GDP growth, revising projections down from 2024.

#### **Security and Defense**

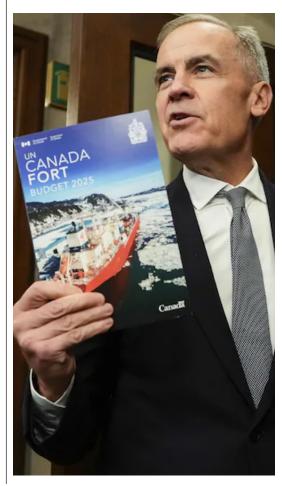
Funds have been given to security, and PM Carney has kept his promise to Trump with \$1.3 billion in border spending and

Iooo new hires for the RCMP. In addition, the Financial Crimes Agency has been established to protect consumers, alongside the introduction of bail reform.

Spending on defense is set to increase, with the government attempting to reach the 2% of GDP NATO defense spending this year, 5 years ahead of schedule, and aiming to reach an absurd 5% of GDP spent on defense by 2035. This amount of spending in uncertain times seems unreasonable, especially during peacetime.

#### **Conclusions**

The budget is ambitious, aiming for the goal of being the strongest economy in the G7 over the next few years. Overall, Budget 2025 is a step in the right direction for Canada, especially when it comes to infrastructure, housing, and cuts in excessive public spending. However, the mounting deficit worsening due to tax cuts and increased spending is a bad sign, and it will be seen whether there will be a reckoning or whether economic growth will save us.



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### SPONGE CITIES CAN CREATE AFRICA'S CLIMATE-RESILIENT FUTURE

**ALEXANDER ZHANG** 

JUNIOR EDITOR

"Water is flooding everywhere! Everybody come out, everybody come out!" recalls Saleh Bukar, a 28-year-old, awakened by his neighbours' frantic cries during a flood in Maidaguri, the capital of the Nigerian state of Borno. Due to a breach in a nearby dam, 40 percent of the capital was flooded for ten days, resulting in around 37 deaths and 58 injuries. This situation isn't unique to Nigeria, it affects all countries throughout Sub-Saharan Africa (SSA).

SSA contributes less than four percent of greenhouse gas emissions, yet it "bears the brunt" of climate change. In 2024, devastating floods affected over four million people, claiming hundreds of lives and displacing millions. These floods destroyed schools, hospitals and contributed to a significant death toll, which will only worsen as climate change progresses.

#### The Flood Crisis in SSA

No region is more vulnerable to natural disasters than SSA. A recent ecological threat report covering 228 independent territories and states identified the region as the epicenter of vulnerability, accounting for two-thirds of global 'hotspot countries'— those confronting severe ecological threats and low urban resilience at the same time. In 2022, flooding killed over 800 people in Nigeria, Chad, Niger and neighbouring countries.

These major flooding events displaced I.3 million people in Nigeria and damaged over a million hectares of farmland.



In Niger, floodwater damaged or destroyed more than 30,000 shelters, 126 classrooms, six medical centres, and 234 grain stores. Adapting to these historic floods isn't cheap either. According to the WMO State of the Climate in Africa 2023 report, the cost of adaptation is expected to be 30-50 billion USD per year or two to three percent of the region's GDP. Without urgent intervention, these floods threaten to push entire communities into a cycle of displacement and poverty. Additionally, SSA is also dealing with other issues such as food insecurity and water pollution, issues that are also exacerbated by flooding.

#### Why Floods Are Worsening

These floods are often caused by multiple factors, but a major cause is torrential rainfall. Due to rising global temperatures, rainfall levels have steadily increased over the past five years. Compared to 2022's intense flooding, the data showed that 2024

did not show an abnormal amount of precipitation but a rising trend of increased rainfall. The World Bank gathered precipitation data of nine SSA countries affected by flooding and found an average 6.5 percent increase in overall rainfall compared to the 30-year median. For example, Chad had an 8 percent increase in annual rainfall, and Niger had a 16 percent increase. If precipitation intensifies, soil is less likely to absorb excess water, resulting in it flowing into rivers, thus increasing the likelihood of flooding. These record precipitation levels suggest that flooding may no longer be rare and is expected to become more frequent.

However, this increased flooding risk is exacerbated by anthropogenic activities. One of these activities is rapid urbanization. Currently, Africa is experiencing a population growth rate of 2.6 percent per year, and its urban population is expected to triple from 548 million to 1.5 billion by 2050. While this urbanization offers better socioeconomic opportunities, it is often unplanned, causing people with limited income to live in floodprone areas. The expansion of cities also changes the environment around it to satisfy human needs. For example, building roads and pathways increases the amount of impervious surfaces, such as concrete and asphalt, which intensifies the damage from flooding in cities.



### SPONGE CITIES CAN CREATE AFRICA'S CLIMATE-RESILIENT FUTURE

### The Limits of Nature-Based Solutions (NbS)

To combat these increasing floods, Africa has employed numerous strategies known asnature-based solutions to minimize flooding. For example, in Tanzania, the Msimbazi Basin initiative, funded by the World Bank, invested 260 million USD to prevent Dar es Salaam from extreme flooding. This is achieved by combining natural approaches such as restoring rivers, planting trees, with artificial ones such as building dams. This "green-gray" infrastructure integrates natural ecosystems with traditional infrastructure to further enhance urban resilience.

However, these solutions have proven ineffective. While NbS somewhat reduces flooding risk, they struggle to keep up with SSA's rapid urbanization and poor infrastructure. In 2012, the World Bank launched the Cities and Climate Change Project that built green-gray infrastructure to restore the Chiveve River in Beira, Mozambique and incorporated tide outlets. Despite its completion in 2020, Mozambique as a nation still faced severe flooding over the past five years. In 2025, Cyclone Jude made landfall in Mozambique and brought over 200 mm of rainfall, leading to significant flooding. According to the National Institute for Natural Disasters, almost 400,000 people were affected, and over 88,000 homes across the country were damaged or destroyed.



Beira, Mozambique

#### **How Sponge Cities Can Save SSA**

Given the persistently worsening impacts of flooding despite large-scale NbS projects, SSA may need to complement these efforts with an urban-focused approach—such as the sponge city framework. A sponge city is defined by integrating an abundance of natural elements into an urban area. This includes adding various features such as trees, parks, and lakes. With more green spaces, cities can easily absorb excess water from rainfall and flooding—like a sponge.

In addition to adding more greenery, there are other ways to make a city more 'spongy'. One such way is to use more permeable materials that allow water to be absorbed more easily. For example, SSA could use permeable pavement for roads instead of concrete or asphalt. SSA could also use rainfall harvesting systems to capture runoff and alleviate pressure on stormwater systems. These techniques don't just mitigate flood risks but also improve water quality and create more livable environments.

#### Smart Cities as a Flood-Fighting Force

Artificial Intelligence (AI) could also further enhance a sponge city's effectiveness. By collecting and analyzing a wide range of data, such as land conditions and river flow, smart cities with AI models are capable of predicting when floods will happen. Deep learning models could differentiate between different types of floods that all require unique response strategies. With constant adaptation, these models learn from each flood, each human response, thus becoming more skilled at anticipating future events.



Dar Es Salaam, Tanzania

Still, sponge cities do have some challenges, such as financing and governmental hurdles. However, the sponge city framework is far more advanced than NbS, as it reduces SSA's flooding risk while accommodating its urban and economic development needs. When this framework is combined with smart city technologies, it could better shape the future of SSA's infrastructure and urban development.

#### Conclusion

SSA is at the frontline of climate change with steadily increasing floods that damage precious infrastructure needed to support its rapid urbanization. With rainfall intensifying, floods are no longer sporadic emergencies; they are recurring disasters. While current adaptation methods are working to some extent, more transformative solutions are needed.

The sponge and smart city model offers such a solution, showing how SSA cities could live with nature rather than fear it. By integrating green spaces with gray infrastructure, leveraging the power of AI, SSA can further enhance urban resilience by upgrading its existing nature-based solutions. If given the funding and support, sponge and smart cities could turn the tide, making SSA's urban future more resilient, equitable and sustainable.



Lagos, Nigeria

