

POLICY REFORMS TO CLIMB MOUNT EVEREST: ECONOMIC, SOCIAL AND SAFETY IMPLICATIONS OF NEPAL'S NEW 7000M PREREQUISITE RULE

ABSTRACT

Mount Everest, the highest peak in the world, attracts hundreds of climbers each year into Nepal. This paper focuses on the regulatory reforms proposed by Nepal in 2025 (i) imposing new permit fees (increase from USD 11000 to USD 15000), (ii) prerequisite to summit a 7000m peak in Nepal, (iii) fee waiver for a certain peaks ranging up to 7132m for two years to develop least visited western region. These could change climbers' behaviour, manage risk, and support sustainable mountaineering in Nepal. Considering this, the study investigates the impact this policy shift may have on climber demand and destination choices. By connecting permit rules with climbers' decision-making and local economic impacts, this study aims to provide practical strategies for policymakers seeking to balance safety, sustainability, and tourism income on overcrowded peaks. Previous research on adventure tourism highlights growing concerns about overcrowding, waste, and risk on Everest. This research paper combines a comparative analysis of Everest and substitute peaks, with a literature-based estimate of climber substitution behaviour. This paper argues that a well-designed permit system requiring prior high-altitude experience and higher fees would reduce inexperienced climbers, promote safer expeditions, and shift demand toward other peaks such as Aconcagua, Denali, K2 or other 7000/8000m peaks within Nepal. While this reform could increase income for sherpas and porters, reduce risk and minimise low-budget climbs, it may also temporarily reduce job opportunities if overall Everest demand declines as climbers may have to realign their plans when the new rule comes to effect.

Keywords: Mount Everest, High-altitude mountaineering, Everest tourism, Sustainable adventure tourism, Sports economics.

INTRODUCTION

Mount Everest - peak of the world, has been the ultimate symbol of high-altitude mountaineering and one of the most iconic parts of global adventure tourism. Despite its extreme altitude, unpredictable weather conditions and life-threatening risks, this peak attracts hundreds of mountaineers every year. Since the landmark

summit of Sir Edward Hillary and Tenzing Norgay in 1953, Everest has transformed from an Elite exploration to a commercialised industry. The rapid growth of expeditions on Mount Everest raises increasing concerns about safety, environmental degradation, overcrowding and sustainability. Despite these challenges, Everest contributes not only to Nepal's cultural identity, but to its economy with climbing alone contributing to a few hundred million dollars and supporting the sherpa livelihoods and the community associated with mountaineering.

Everest industry faces a set of challenges such as crowding on summit routes, inexperienced climbers relying heavily on sherpa support, altitude sickness, risk of avalanches and sudden changes in weather conditions. The tragic incidents in 2014 and 2015 - when avalanches claimed dozens of lives, and the international media portrayal of "traffic jams" in 2019 at Hillary Step further cemented Everest's reputation as both a triumph as well as tragedy of modern adventure tourism. In response to these, the Nepal government announced in 2024 its plan to require climbers to first scale a 7000m peak within Nepal prior to applying for a permit to climb Mt. Everest beginning 2025. However, this has generated debate among stakeholders - climbers, sherpa guides, expedition companies regarding its feasibility and unintended consequences. This shift in new reforms proposed shows Nepal's firm attitude towards safe and sustainable mountaineering. However, the question remains: how does this new 7000m prerequisite impact Nepal's economy, climbers' preparedness and safety, sherpa's income and sustainable mountaineering? While policy makers may argue that these reforms might be in the best interest of climbers and also Nepal as a safe and sustainable mountaineering destination, this shall provide access to only those who are prepared well, and also reduce international tourists in the short term until they recalibrate their plans.

As a 15years old young mountaineer, I have summited Mt. Elbrus (5642m) in Russia and Mt. Kilimanjaro (5895m) in Tanzania. It is my ambition to summit Mt. Everest as a part of my Seven summits mission that I kickstarted early 2025. These policy reforms by Nepal will have a direct impact on my schedules and I grew curious to further research this topic on the overall implications and the way forward.

According to Fundytus (2021), Everest's loosely regulated permit system lets in many unqualified climbers, which increases the danger while on the mountain and

forces Sherpas to take most of the risks for little benefit. Gilchrist et al. (2024) suggests that these pressures have made it harder for Nepal's policymakers as they struggle to balance income from high permit fees with the urgent requirement to manage risk, safety, environmental impact and the mountain's long-term competitiveness as a destination. A part of the main question is whether imposing stricter permit rules could drive away unqualified climbers as the huge amount of people climbing unsafe reduces, while increasing safe, sustainable and higher-value expeditions. Nepal's recent prerequisite estimated to be implemented from 2026 onwards requires climbers to have summited a 7,000 m peak within Nepal before attempting Everest shows Nepal's adoption of stricter rules. Insights from Falk (2013) study of climate based shifts in Austrian winter tourism and Deason et al (2022) findings on tourists' view on climate change in Mexican mountain ecotourism both show how changing external factors like environment and/or regulations can push visitors to reconsider their destination choices.

This paper firstly reviews existing literature on Everest's crowding, local labor conditions, destination competitiveness, and substitution behavior in adventure tourism. Then, it outlines the mixed-methods approach which combines a comparative policy analysis of Everest and other major peaks with an estimation of climber substitution scenarios. The results section shows how Nepal's permit policies require a high altitude experience and higher fees may reduce risk levels for climbing expeditions. This may shift some climber demand to other high-altitude peaks such as Aconcagua, Denali, K2 or other 7000/8000m peaks in Nepal which could significantly increase sherpas' earnings. Finally, the paper discusses policy implications for sustainable mountaineering and destination management while concluding with recommendations for balancing safety, sustainability, competitiveness, and local economic impacts in Nepal's adventure tourism sector. Overall, the analysis argues that well-designed permit reforms can be used as a strategic tool to improve safety, enhance destination value and ensure long-term sustainability of Nepal's high-altitude tourism economy.

This paper primarily focuses on the new reforms proposed by Nepal related to the prerequisite to climb a 7000m peak in Nepal, its implications on Mount Everest and other 8000m peaks in Nepal. Scope is limited to Nepal, while comparative insights are made from Pakistan (K2), Argentina (Aconcagua) and USA (Denali). The study

also relies on secondary data considering that this is a new reform under review, and lack of evidence on long-term impacts.

LITERATURE REVIEW

Everest Tourism & Risk

The rapid commercialisation of Everest has increased risks for Sherpas and inexperienced climbers, with Sherpas taking part in life-threatening tasks in harsh weather conditions while their protection and pay still remains insufficient. (Fundytus, 2021). As commercial expeditions took over, Mount Everest is now within the reach of less experienced climbers which raises safety concerns for the climbers and the workers. Gilchrist et al. (2024) further explains how Everest has become a crowded stage of national pride, personal ambition and performative achievement - fueled by expanding commercialization and the prestige tied to summiting Everest.

Insights from Hansen, (2023); McCurdy, (2014) state that Everest has experienced rapid commercialisation with guided expeditions, according to lower technical entry barriers, and socio-economic access has increased the number and diversity of climbers (by age, nationality, amateur climbers) and expanded operator business models, creating new management and safety challenges.

Everest's overcrowding and accidents is a threat to Nepal's economy: despite tourism contributing about 6.7% to GDP in 2025, poor safety and management could harm the country's international reputation, reduce climber demand and weaken the sustainability of relying on mountaineering as a stable growth source. Stronger permit rules and experience requirements are needed to protect both revenue and sustainability.

Collectively, these sources highlight the necessity to reform Everest's permit system by prioritizing Sherpas' safety by strictly restricting inexperienced climbers with stronger prerequisites, long-term sustainability, fairness in their income and tourism policy. The old policy required climbers to have summited at least one peak above 7000 meters before being granted a permit to climb Mount Everest. The revised policy makes this requirement stricter by recognising the "7000-meter peak" only if it is located within Nepal.

Huey., et al. (2020) summarises that a climber having prior high altitude experience may enhance the success rate of a summit to Mount Everest, and in addition climbers with prior experience in climbing peaks in Nepal have higher success rates than those without any experience. This might reflect the direct benefit of adequate experience and rate of success. They further went on to analyse the success and death rates for first-time climbers during period 2006-2019 (3600 climbers with paid permits), using the same statistical methods to climbers during period 1990-2005 (2200 first time climbers), and concluded that two third of climbers now reach the summit, versus one third earlier, and the overall death rate of around 1% hasn't changed. It is also noticed that more women are attempting the climb to Mount Everest in recent years (14.6%) compared to the previous period (9.1%).

Destination Competitiveness

Destination competitiveness is influenced by various supporting factors, essential resources and policy mechanisms (Dwyer & Kim, 2003). Their thorough framework emphasises the importance of effective destination management, improving stability, economic benefits and tourist satisfaction. A key concept in this is that policy tools like pricing, regulations, policies and limited access directly have an effect on destination perception, perceived quality and long-term competitiveness.

In this context, Nepal's updated Everest permit policy, which now requires climbers to have summited a 7000-meter peak within Nepal (not just anywhere), presents an example of intentional competitiveness repositioning- to alter its position in the global tourism market in order to improve sustainability, increase revenue or respond to problems like overcrowding. The policy shifts from a loosely enforced prerequisite to one that benefits both Nepal's economy and Sherpa-climber safety. By ensuring that only experienced climbers qualify for an Everest permit, the policy helps reduce the number of unprepared climbers, lowers expedition risk and channels more climbing traffic to Nepal's other high-altitude peaks while generating additional income for local communities. This not only strengthens Nepal's financial stake but in mountaineering tourism by also supporting a safer and more sustainable model for Everest expeditions.

In a comparative analysis of tourism in Barcelona and Catalonia, Alvado et al (2021) illustrates how tourist flow management, product diversification and coordinator

public-private strategy can improve resilience and sustainability. Their findings highlight the importance of coordinated leadership and strategic planning - especially in times of crisis - for tourist destinations to remain competitive and sustainable. Applying this to Nepal, the revised policy shows a shift away from mass-market tourism towards a model focused on value, safety, sustainability and experience-driven mountaineering.

Climate and Demand patterns

Shifting climate and environmental conditions influence the tourism demand, especially for high altitude destinations such as Mount Everest. Falk (2013) provides empirical evidence from the Austrian ski industry, showing that demand declines when climatic conditions worsen or when prices rise. The study found that visitors adjust their travel plans based on both weather and price, they often choose alternative destinations as a result. Although Falk's work focuses on winter sports, it is similar to high-altitude mountaineering: climbers are likely to adjust their expedition plans, choosing alternative peaks such as K2, Denali or Aconcagua when faced with reduced accessibility or higher costs for Everest.

Deason et al. (2020) further strengthen this similarity by demonstrating that tourists' perception of environmental risk directly influences destination choice. In their survey of mountain ecotourism in Southern Mexico, they found that negative perceptions of climate change impacts such as safety concerns or degraded conditions which significantly increased the number of visitors switching to other alternative destinations. This behaviour is similar to how climbers are reacting to Nepal's updated Everest regulations, which now strictly requires climbers to complete a 7000-meter climb within Nepal.

The studies indicate that the demand for climbing Mount Everest is not fixed; rather, it is highly responsive to changes in environmental conditions, perceived risks, and economic costs. This finding has important policy implications: while stricter regulations may decrease the number of inexperienced climbers and enhance safety, they could also drive climbers to switch to less-regulated peaks instead. For Nepal, understanding these shifts in demand is essential for achieving a balance between safety, environmental sustainability and maintaining long-term competitiveness in the global high-altitude climbing market.

Crowding, Regulation, and Behavior

Understanding how climbers respond to crowding and regulation is crucial to predicting the impacts of Nepal's revised permit system. Manning (1999) discusses outdoor recreation, visitor behavior in crowded wilderness environments is shaped not only by physical capacity limits but also by perceptions of crowding, fairness and regulation. In Everest's context, "the human traffic jam" waiting at bottlenecks such as the Hillary Step shows how high demand can transform an expedition into a traffic jam, increasing risks like frostbite, altitude sickness, and even death to alarming rates. Manning's findings suggest that well-designed permit policies can regulate climber flows, reduce crowding and improve climbing experience - strengthening Nepal's reputation as a sustainable and competitive adventure tourism destination.

Huey et al. (2020) statistically tested crowding effects and found surprisingly very limited evidence that crowding actually increased death probability in their analysis, though they caution that crowding raises other operational hazards and risks such as exhaustion.

Hall & Page (2014) explain this further by situating tourism within broader systems of governance and place management. They show how tourism destinations must constantly negotiate between growth, sustainability and regulation. Their work in tourism geography emphasizes how destinations operate within global competition while managing overcrowding, community impacts and environmental damages. They argue that regulations are a necessity for sustainable growth. Applied to Everest, this means that the challenge is not only the number of climbers but how Nepal manages that flow through permit systems, guide regulations and prerequisites.

Manning (1999) and Hall & Page (2014) show that regulations work best when seen as fair and necessary, while overly strict or weakly enforced rules risk dissatisfaction and danger. For Everest, the 7000m-in-Nepal rule may reduce some climber numbers but also reinforce that only well prepared mountaineers should attempt the peak. Overall, the literature suggests that Everest's new permit regulation will reshape the climbing experience. It influences climber decisions and redistributes demand, this regulation serves as an essential tool for managing safety, promoting environmental sustainability and controlling competition. They

are not a simple way to earn money, but a strategic tool to improve safety, protect the environment and regulate competition.

METHODOLOGY:

This research adopts a mixed-method combining qualitative, literature-based frameworks supported by secondary data analysis as a case comparison. The core research question remains as to how Nepal's new 7,000m prerequisite and existing Everest permit costs affect its competitiveness in the global high-altitude climbing market, and what is the impact on climber demand and destination choices.

Using this method for tourism policy research offers a way to combine theoretical concepts with empirical evidence and comparisons of real-world cases (Hall & Page, 2014). By applying frameworks for destination competitiveness (Dwyer & Kim, 2003), behavioral research on regulation (Manning, 1999), and empirical studies on substitution (Falk, 2013; Deason et al., 2023), the methodology triangulates these insights to create a small size hypothesis for Everest's future, policy outcomes, competitiveness, tourism scenarios and sustainability.

1. *Literature-based scenario modeling:* Dwyer and Kim's (2003) model of destination competitiveness provides conceptual framework, emphasizing policy, pricing, safety and sustainability as determinants of a destination's attractiveness. Everest's permit regulations are evaluated using these determinants, to see how competitiveness may shift under the new prerequisite.
2. *Comparative Case Analysis:* A structured comparison between Everest and three alternative peaks- K2, Denali and Aconcagua. This aligns with Gilchrist et al. 's (2024) framing of Everest as a "global mountain" and makes it an iconic climbing destination in the global climbing market.
3. *Scenario Modeling:* A simple quantitative scenario is constructed to estimate the potential decline in Everest climbers and their redistribution to alternative peaks. Drawing from Falk's (2013) findings on winter tourism, where high cost and limited access directly impacted demand by changing destinations.

Rather than testing the study through primary data, the study summarises findings from existing sources and evaluates them through a case comparison.

Case Comparison: Everest vs Other High Peaks

Several research scholars and policy analysts examine how the permit pricing, quotas and governance measures influence volume, operator behaviour and local economies. Commercial mountaineering across the world's highest peaks bring in a vast amount of differences in risk, economics and the way they are guided. Table 1 below outlines the comparative parameters of Everest, other 7000-8000m peaks in Nepal, and non-Himalayan peaks such as K2, Aconcagua and Denali.

Mountain	Country	Height (m)	Permit Cost (USD)	Avg Annual Climbers	Success Rate	Park Rules	Challenges
Everest	Nepal	8849	11000-15000	800	50-60%	Age: Min16 years	*Altitude sickness *Weather and Climate conditions *Avalanches *Khumbu Icefall
Manaslu	Nepal	8163	~1000	<500	60-70%	Age: Min16 years	*Altitude sickness *Technical routes *Unpredictable weather and avalanches
Himlung Himal	Nepal	7126	~500	<500	70-80%	Age: Min16 years	*Altitude sickness *Mixed terrain *Unpredictable weather
K2	Pakistan	8611	3500	0-200	~ 25%	Min age not specified	*Technical difficulty *Weather and Climate conditions *Remote location and logistics *Avalanches and rock fall
Aconcagua	Argentina	6961	850-1500	3500-4000	30-40%	Age: Min14 years	*Altitude and Load carry *Extreme cold and high winds *Unpredictable weather * Rugged terrain
Denali	USA	6190	340	1000	~ 50%	Min age not specified	*Extreme cold, technical glacier travel *Unpredictable weather and winds *Altitude sickness, need for high endurance * Heavy load carry

The comparative cases (Everest, Manaslu, Himlung Himal, K2, Denali and Aconcagua) were chosen based on three criterias:

- a. Global Significance: Each peak is an epicenter in the Seven Summits or 8000m climbing market.

- b. Policy Variation: They represent diverse governance models: Nepal's high-cost, permit-intensive Everest; Pakistan's lightly regulated but dangerous K2; the U.S.'s safety-driven Denali; and Argentina's mid-priced, mass-market Aconcagua.
- c. Substitution Potential: Each peak is a realistic alternative for climbers halted by Everest's stricter rules, making them the perfect example for testing substitution behavior.

Drawing from Gilchrist et al.(2024) and official tourism reports, Everest remains the most accessible high-altitude icon in terms of marketing, but the new prerequisite significantly narrows the eligibility pool. In contrast, K2 and Denali rely on inherent difficulties and environmental factors rather than policy restrictions to limit the amount of climbers.

FINDINGS AND ANALYSIS

Economic Dependence:

Nepal's reliance on the Everest expedition is unparalleled as estimates suggest that this expedition alone contributes to about USD 300m annually to Nepal's economy, with the permit cost being highest among any of the 8000m peaks. However, comparing this to Denali which only contributes modestly to Alaskan regional economy, as well as with Aconcagua primarily supporting the Mendoza province in Argentina, while the support from K2 to Pakistan's economy is not very significant.

Volume of Climbers and Safety Measures:

Despite having the highest permit fees, Everest attracts anywhere between 600-800 climbers annually, which is not the case with any other 8000m peaks. The fatality rate is around 1% which is lower than some of the other 8000m peaks, and the success rate is high compared with K2 or other 8000m peaks in the region.

Distribution of Sherpa Economy:

While this industry is fully dependent on Sherpas for guiding, load carrying and rope fixing, it creates economic opportunities as well as occupational risks. Expanding demand for 7000m as a minimum attainment prior to issuance of permit to Everest, will help redistribute the income to some of the other regions that have lacked enough income and attention.

Prerequisites and Challenges:

Everest and most other high altitude peaks have a minimum age requirement of 16 years to be able to obtain a permit, and at some other 7000m peaks in some special cases lower age is accepted subject to health verifications and authorisations by both parents. However to summit these peaks, climbers have to face significant challenges as well as exhibiting very high physical and mental endurance.

However, despite all of these factors, a successful expedition to Everest is very aspirational and remains as the most sought after peak as the “roof of the world” attracting climbers of various experience levels.

DISCUSSION

Policy effectiveness and safety outcomes:

The primary reason Nepal proposes this new prerequisite purely from the safety of climbers per se. By mandating prior high altitude experience within Nepal, policy makers aim to reduce fatalities that are caused due to inexperience. While this pre-requisite shall enhance climber safety and regulate overcrowding on Mount Everest, its effects extend into multiple domains such as Nepal’s economy, livelihood of sherpas and the community, and the nation’s competitive standing in global mountaineering.

Economic trade-offs

This policy has both positive and negative spillovers. On one hand, this will create new demand for climbs of 7000m peaks that shall help distribute tourist inflow away from Everest, spreading the revenue generation. On the other hand, higher permit costs and added requirements may deter budget conscious climbers, potentially reducing the volume of climbers impacting foreign exchange earnings.

Nepal’s competitive advantage in international mountaineering

The challenge for Nepal lies in balancing safety, competitiveness and sustainability. Historically, the country has been focused on high-volume, affordable cost mountaineering to attract global mountaineers as a strategy. Western countries rely on strong institutional frameworks, rescue services and standardized guide certifications. In the Asia region, Nepal holds a significant brand advantage due to Everest’s symbolic status, sherpa expedition and extensive infrastructure.

Sherpa's Livelihood and safety considerations

Sherpas heavily rely on the seasonal influx of climbers and their livelihood heavily dependent on mountaineering expeditions. While the increase in prerequisites could expand employment opportunities by creating guiding demands on previously under climbed 7000m peaks. Such diversification across peaks reduces vulnerability from over reliance on income from Mount Everest alone. Nepali sherpas often perform the most dangerous tasks, under conditions of wage inequality compared to foreign guides. While this policy reforms may spread economic activity, it may also reinforce structural inequities unless paired with better labor protections and insurance reforms

International co-operation

Nepal's policy will have an overall effect and this cannot be seen in isolation. Effective governance often requires regional co-operation and alignment with international best practices. International mountaineering organisations provide guidelines for sustainable mountaineering. Nepal could formally integrate into its regulatory systems, rescue standards and climber certifications. When this is done, it may enhance legitimacy, reduce overcrowding in the way, attract responsible climbers, and also reduce fatalities.

Outcome 1: Reduction in number of inexperienced climbers by requiring prior experience on a 7000 meter peak in Nepal, the policy aims to reduce the number of expeditions that require rescues and decrease fatalities in high-risk areas.

Outcome 2: Destination Substitution Climbers, particularly from outside of Asia may choose to climb mountains with lesser regulations like K2, Denali or Aconcagua. This aligns with Falk's findings on substitution in ski tourism where participants switched resorts when access or conditions changed. Similar behaviour is supported by Deason et al. survey-based evidence of destination changes due to tourist's perception of risk.

Short- term effects:

1. Less crowding on Everest's fixed lines
2. Higher revenue for Sherpas per client, but fewer total expeditions could reduce total seasonal employment opportunities

Long- term effects:

1. Stronger Everest brand, safety-first climb
2. More sustainable mountaineering economy built on quality over quantity

CONCLUSION AND RECOMMENDATIONS

The new 7000 meter prerequisite in Nepal is more than a technical rule-it's a strategic repositioning of Everest in the global adventure marketplace. By favoring skilled, higher-value climbers, Nepal may improve safety and sustainability while reinforcing its competitive advantage. However, this will require carefully balancing market share, destination reputation, safety standards and economic stability. Permit policies are a strong tool for shaping the future of tourism, environmental integrity and social equity in the Himalayas.

Recommendations:

1. Adjust permit fees based on demand and other factors to increase revenue while maintaining accessibility.
2. Promote other mountain peaks in Nepal to attract climbers affected by the 7000 meter prerequisite while reducing Everest's traffic.
3. Implement a strict system to verify climber's qualifications and past experience before they are allowed to climb.
4. Establish training programs in Nepal's 6000/7000m peaks (ie. Ama Dablam and Himlung Himal). This would allow new climbers to meet the prerequisites of climbing Everest, while keeping the economic benefits in Nepal.
5. Promote Nepal as a destination for progressive mountaineering journeys rather than just Everest attempts - reframing competitiveness around sustainability.
6. Mandate minimum wage standards and insurance coverage for all expedition workers and to also ensure income stability even if total climber numbers reduce.
7. Use real-time online booking and quotas on daily routes to avoid traffic on summit days, especially on the Hillary step.

8. To promote sustainable practices, expeditions will be required to pay an environmental bond. The bond will be refunded upon proof that they have removed all their waste.
9. Establish a clear timeline as to when the policy will be in force, as this will help the global mountaineering community to equip themselves and plan accordingly to meet this new requirement.
10. Accepting international experience at Aconcagua, Denali or K2 as a qualifying criteria for a certain period to obtain the Everest permit.

BIBLIOGRAPHY:

Alvado, A., Sorribes, J., & Boyra, J. (2021). *The Tourist Destination Management and Its Dynamism: The Case of Barcelona Versus Catalonia*. 32(1), 171–188.

<https://doi.org/10.35765/PK.2021.3201.12>

Deason, G., Seekamp, E., Terando, A., & Rojas, C. (2023). Tourist Perceptions of Climate Change Impacts on Mountain Ecotourism in Southern Mexico. *Tourism and Hospitality*, 4(3), 451–466. <https://doi.org/10.3390/tourhosp4030028>

Dwyer, L., & Kim, C. (2003). Destination Competitiveness: Determinants and Indicators. *Current Issues in Tourism*, 6(5), 369–414.

<https://doi.org/10.1080/13683500308667962>

Falk, M. (2013). Winter tourism demand and climate: Empirical evidence from the Austrian ski industry. *Tourism Economics*, 19(4), 817–833.

Fundyus, K. (2021). Climbing Mount Everest: A critical reflection on mountain adventure tourism in Nepal using a population health approach. *Journal of Integrated Studies*, 13(1). Retrieved from

<https://jis.athabascau.ca/index.php/jis/article/view/298>

Gilchrist, P., Hansen, P. H., & Westaway, J. (2024). *Other Everests: One mountain, many worlds*. Manchester University Press 2024.

Hall, C. M., & Page, S. J. (2014). *The geography of tourism and recreation: Environment, place and space* (4th ed.). London: Routledge.

Overall, this is an ambitious and timely piece that tackles an important contemporary issue in adventure tourism policy. The author's personal connection to mountaineering adds authenticity to the work, and the topic is certainly relevant given the ongoing debates about Everest's commercialization and safety concerns.

The paper demonstrates solid research effort and tackles a complex policy issue from multiple angles. The comparative analysis framework is well-conceived, and the author shows familiarity with relevant academic literature spanning tourism economics, destination competitiveness, and adventure tourism management. The integration of theoretical frameworks from Dwyer & Kim (2003) on destination competitiveness with empirical insights from studies on substitution behavior shows sophisticated thinking for a high school research project.

However, there are several areas where the paper would benefit from revision. The most significant issue is the reliance entirely on secondary sources and theoretical modeling without primary data collection or stakeholder interviews. While this is understandable given the author's circumstances, it limits the depth of analysis and makes some conclusions feel speculative. For instance, the assumptions about climber behavior and economic impacts would be much stronger with survey data from actual climbers, expedition companies, or Sherpa communities.

The methodology section needs strengthening. The "mixed-methods" approach described is essentially a literature review combined with comparative case analysis, which isn't truly mixed-methods research. The scenario modeling mentioned lacks sufficient detail about assumptions and calculations. The author should be more transparent about the limitations of this approach and perhaps reframe the methodology more accurately.

The economic analysis, while interesting, relies on some questionable figures. The claim that Everest contributes "a few hundred million dollars" to Nepal's economy needs better documentation, and the \$300 million annual figure cited later appears inconsistent with other sources. These numbers are crucial to the argument and need more rigorous sourcing.

The paper would benefit from more critical analysis of potential unintended consequences. While the author acknowledges some trade-offs, there's insufficient discussion of how the policy might affect different stakeholder groups differently. For example, how might smaller expedition companies fare compared to larger operators? What about the impact on local communities beyond the Sherpa population?

The writing, while generally clear, suffers from some organizational issues. The introduction is quite long and could be more focused. Some sections repeat information unnecessarily, and the transition between different analytical components could be smoother. The recommendations section, while comprehensive, reads more like a wish list than evidence-based policy suggestions tied directly to the analysis.

There are also some factual concerns that need addressing. The author states they are 15 years old but mentions summiting peaks that typically have minimum age requirements. This raises questions about the personal narrative's accuracy. Additionally, some technical details about mountaineering regulations and permit systems could use verification from official sources.

The comparative table is useful but needs more careful formatting and source attribution. Some of the data appears outdated or inconsistent across different cells, which undermines its analytical value.

Despite these limitations, the paper shows real promise. The author demonstrates genuine passion for the subject and has identified an important policy issue that deserves academic attention. The basic analytical framework is sound, and many of the insights about destination competitiveness and climber behavior are perceptive.

I would recommend major revision with the following priorities: first, strengthen the methodology section with more honest acknowledgment of limitations; second, verify and properly source all economic and statistical claims; third, reorganize the paper to reduce redundancy and improve flow; and fourth, deepen the critical analysis of policy implications with more attention to different stakeholder perspectives.

With these revisions, this could become a solid contribution to the literature on adventure tourism policy. The author should also consider narrowing the scope slightly to allow for deeper analysis of fewer issues rather than the current broad approach. For a high school journal, this represents ambitious and thoughtful work that with revision could serve as an excellent foundation for further research in this area.

Referee Report

This is an ambitious and engaging paper that takes on a very topical subject: Nepal's recent policy reforms around climbing Mount Everest. The author has selected a fascinating issue with wide-ranging economic, social, and safety implications, and the paper succeeds in showing why these new rules matter not just to climbers but also to sherpas, policymakers, and the broader tourism economy. The writing is clear, the structure is logical, and the author shows a genuine passion for the subject.

One of the strengths of the paper is the breadth of perspectives it brings together. The author doesn't just describe the policy; he connects it to debates on sustainability, substitution effects in tourism, and the role of sherpas in the mountaineering economy. The comparative element, looking at K2, Denali, and Aconcagua, adds useful context and shows an awareness that Everest does not exist in isolation. For a student paper, this demonstrates strong initiative and research effort. There are, however, a few areas that could be improved before publication. At times the paper leans heavily on descriptive background, and the main argument could be drawn out more sharply. For instance, the sections on Everest's history and commercialization are informative but repeat points already familiar from the literature; trimming them slightly would keep the focus on the new 7000m prerequisite. In the findings, the author could also go beyond summarizing to make the interpretation more explicit: what do the results imply for Nepal's long-term economic model, and how might sherpas' livelihoods realistically change under these rules?

A second point is that the paper would benefit from more consistent citation practice. Some references are used very effectively (for example, Falk 2013 and Deason et al. 2023 on substitution effects), but elsewhere the claims are more general and could use clearer sourcing. Adding one or two recent policy or news sources from Nepal itself would strengthen the credibility of the argument.

Finally, the conclusion is thoughtful but could be sharpened. Right now, it reads like a list of recommendations. Instead, the author might highlight two or three main takeaways, perhaps one about safety, one about economics, and one about sustainability, and explain briefly why they matter most.

Overall, this is a very promising submission. It is well within the range of publishable quality for a student journal, and with some revisions, mainly tightening the background, strengthening the interpretation, and polishing the conclusion, I would recommend it for publication. **My recommendation is minor revision.**

POLICY REFORMS TO CLIMB MOUNT EVEREST: ECONOMIC, SOCIAL AND SAFETY IMPLICATIONS OF NEPAL'S NEW 7000M PREREQUISITE RULE

ABSTRACT

Mount Everest, the highest peak in the world, attracts hundreds of climbers each year into Nepal. This paper focuses on the regulatory reforms proposed by Nepal (i) imposing new permit fees to USD 15000 from current USD 11000 effective 01 Sep 2025, (ii) prerequisite to summit a 7000m peak in Nepal – under review by Nepal's National Assembly, (iii) fee waiver for a certain peaks ranging up to 7132m for two years to develop least visited western region. These could change climbers' behaviour, manage risk, and support sustainable mountaineering in Nepal. Considering this, the study investigates the impact this policy shift may have on climber demand and destination choices. By connecting permit rules with climbers' decision-making and local economic impacts, this study aims to provide practical strategies for policymakers seeking to balance safety, sustainability, and tourism income on overcrowded peaks. Previous research on adventure tourism highlights growing concerns about overcrowding, waste, and risk on Everest. This research paper combines a comparative analysis of Everest and substitute peaks, with a literature-based study of impacts. This paper argues that a well-designed permit system requiring prior high-altitude experience and higher fees would reduce inexperienced climbers, promote safer expeditions, and shift demand toward other peaks such as Aconcagua, Denali, K2 or other 7000/8000m peaks within Nepal. While this reform could increase income for sherpas and porters, reduce risk and minimise low-budget climbs, it may also temporarily reduce job opportunities if overall Everest demand declines as climbers may have to realign their plans when the new rule comes to effect.

Keywords: Mount Everest, High-altitude mountaineering, Everest tourism, Sustainable adventure tourism, Sports economics.

INTRODUCTION

Mount Everest - peak of the world, has been the ultimate symbol of high-altitude mountaineering and one of the most iconic parts of global adventure tourism. Despite its extreme altitude, unpredictable weather conditions and life-threatening risks, this peak attracts hundreds of mountaineers every year, Huey., et al. (2020). Since the landmark first ascent of Sir Edward Hillary and Tenzing Norgay in 1953, Everest has transformed from an Elite exploration to a commercialised industry, with rapid growth in expeditions raising increasing concerns about safety, environmental degradation, overcrowding and long-term sustainability (Hassani & Shokouh Saljoughi, 2024).

Everest industry faces challenges such as inexperienced climbers relying heavily on sherpa support, avalanches and unpredictable weather (Huey et al., 2020; Miner et al., 2020) The tragic incidents in 2014 and 2015 - when avalanches claimed dozens of lives (Parker, 2014; BBC News, 2015) and the international media portrayal of “traffic jams” in 2019 at Hillary Step further cemented Everest’s reputation as both a triumph as well as tragedy of modern adventure tourism (BBC News, 2019). In response to these, the Nepal government announced its plan to require climbers to first scale a 7000m peak within Nepal prior to applying for a permit to climb Mt. Everest (Reuters, 2025). However, this has generated debate among stakeholders - climbers, sherpa guides, expedition companies regarding its feasibility and unintended consequences.

According to Fundytus (2021), Everest’s loosely regulated permit system lets in many unqualified climbers, which increases the danger while on the mountain and forces Sherpas to take most of the risks for little benefit. Gilchrist et al. (2024) suggests that these pressures have made it harder for Nepal’s policymakers as they struggle to balance income from high permit fees with the urgent requirement to manage risk, safety, environmental impact and the mountain’s long-term competitiveness as a destination. A part of the main question is whether imposing stricter permit rules could drive away unqualified climbers as the huge amount of people climbing unsafe reduces, while increasing safe, sustainable and higher-value expeditions. Insights from Falk (2013) study of climate based shifts in Austrian winter tourism and Deason et al (2023) findings on tourists’ view on climate change in Mexican mountain ecotourism both show how changing external factors like environment and/or regulations can push visitors to reconsider their destination choices.

As a 15years old young mountaineer, I have summited Mt. Elbrus (5642m) in Russia “Top of Europe” during April 2025 and Mt. Kilimanjaro (5895m) in Tanzania “Roof of Africa” during June 2025, both of which doesn’t have a specific age requirement. I intend to summit Mt. Aconcagua (6961m) in Argentina “Top of South America” during Jan 2026. It is my ambition to summit Mt. Everest when I am 16 as a part of my 7 Summits mission Messner List & Bass List (Figure 1) that I kickstarted early 2025. These policy reforms by Nepal will have a direct impact on my schedule to climb Mount Everest and I grew curious to further research this topic on the overall implications and the way forward.

This paper primarily focuses on the new reforms proposed by Nepal related to the prerequisite to climb a 7000m peak in Nepal, its implications on Mount Everest and other 8000m peaks in Nepal. Scope is limited to Nepal, while comparative insights are made from Pakistan (K2), Argentina (Aconcagua) and USA (Denali). The study primarily relies on existing literature and secondary data considering that this is a new reform under review, and lack of evidence on long-term impacts.

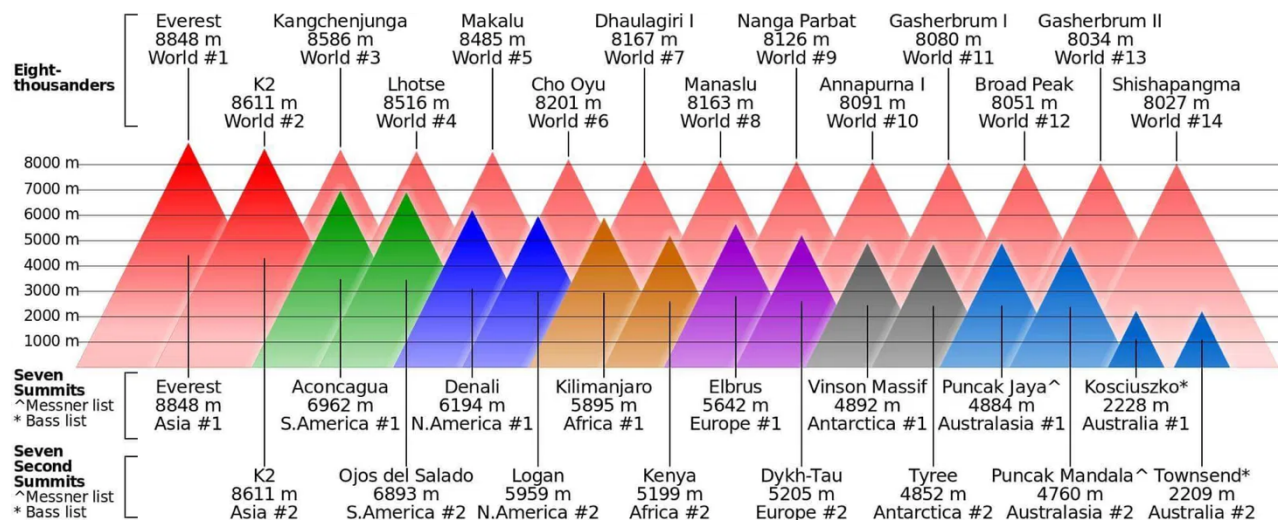


Figure 1 – Highest Mountains on Earth

LITERATURE REVIEW

1. Everest Tourism & Risk

The rapid commercialisation of Everest has increased risks for Sherpas and inexperienced climbers, with Sherpas taking part in life-threatening tasks in harsh weather conditions while their protection and pay still remains insufficient (Fundytus, 2021). As commercial expeditions took over, Mount Everest is now within the reach of less experienced climbers which raises safety concerns for the climbers and the workers. Gilchrist et al. (2024) further explains how Everest has become a crowded stage of national pride, personal ambition and performative achievement - fueled by expanding commercialization and the prestige tied to summiting Everest.

Insights from Hansen, (2023) state that Everest has experienced rapid commercialisation with guided expeditions, according to lower technical entry barriers, and socio-economic access has increased the number and diversity of climbers (by age, nationality, amateur climbers) and expanded operator business models, creating new management and safety challenges.

Everest's overcrowding and accidents is a threat to Nepal's economy: despite tourism contributing about 6% to GDP in 2024 (ABM 2025), poor safety and management could harm the country's international reputation, reduce climber demand and weaken the sustainability of relying on mountaineering as a stable growth source. Stronger permit rules and experience requirements are needed to protect both revenue and sustainability.

Collectively, these sources highlight the necessity to reform Everest's permit system by prioritizing Sherpas' safety by strictly restricting inexperienced climbers with stronger prerequisites, long-term sustainability, fairness in their income and tourism policy. The old policy required climbers to have summited at least one peak above 7000 meters before being granted a permit to climb Mount Everest. The revised policy makes this requirement stricter by recognising the "7000-meter peak" only if it is located within Nepal.

Huey., et al. (2020) summarises that a climber having prior high altitude experience may enhance the success rate of a summit to Mount Everest, and in addition climbers with prior experience in climbing peaks in Nepal have higher success rates than those without any experience. This might reflect the direct benefit of adequate experience and rate of success. They further went on to analyse the success and death rates for first-time climbers during period 2006-2019 (3600 climbers with paid permits), using the same statistical methods to climbers during period 1990-2005 (2200 first time climbers), and concluded that two third of climbers now reach the summit, versus one third earlier, and the overall death rate of around 1% hasn't changed. It is also noticed that more women are attempting the climb to Mount Everest in recent years (14.6%) compared to the previous period (9.1%).

2. Destination Competitiveness

Destination competitiveness is influenced by various supporting factors, essential resources and policy mechanisms (Dwyer & Kim, 2003). Their thorough framework emphasises the importance of effective destination management, improving stability, economic benefits and tourist satisfaction. A key concept in this is that policy tools like pricing, regulations, policies and limited access directly have an effect on destination perception, perceived quality and long-term competitiveness.

In this context, Nepal's updated Everest permit policy, which now requires climbers to have summited a 7000-meter peak within Nepal (not just anywhere), presents an example of intentional competitiveness repositioning- to alter its position in the global tourism market in order to improve sustainability, increase revenue or respond to problems like overcrowding. The policy shifts from a loosely enforced prerequisite to one that benefits both Nepal's economy and Sherpa-climber safety. By ensuring that only experienced climbers qualify for an Everest permit, the policy helps reduce the number of unprepared climbers, lowers expedition risk and channels more climbing traffic to Nepal's other high-altitude peaks while generating additional income for local communities. This not only strengthens Nepal's financial stake but in mountaineering tourism by also supporting a safer and more sustainable model for Everest expeditions.

In a comparative analysis of tourism in Barcelona and Catalonia, Alvado et al (2021) illustrates how tourist flow management, product diversification and coordinator public-private strategy can improve resilience and sustainability. Their findings highlight the importance of coordinated leadership and strategic planning - especially in times of crisis - for tourist destinations to remain competitive and sustainable. Applying this to Nepal, the revised policy shows a shift away from mass-market tourism towards a model focused on value, safety, sustainability and experience-driven mountaineering.

3. Climate and Demand patterns

Shifting climate and environmental conditions influence the tourism demand, especially for high altitude destinations such as Mount Everest. Falk (2013) provides empirical evidence from the Austrian ski industry, showing that demand declines when climatic conditions worsen or when prices rise. The study found that visitors adjust their travel plans based on both weather and price, they often choose alternative destinations as a result. Although Falk's work focuses on winter sports, it is similar to high-altitude mountaineering: climbers are likely to adjust their expedition plans, choosing alternative peaks such as K2, Denali or Aconcagua when faced with reduced accessibility or higher costs for Everest until they are well prepared to meet the regulations and the increased fees.

Deason et al. (2023) further strengthen this similarity by demonstrating that tourists' perception of environmental risk directly influences destination choice. In their survey of mountain ecotourism in Southern Mexico, they found that negative perceptions of climate change impacts such as safety concerns or degraded conditions which significantly increased the number of visitors switching to other alternative destinations. This behaviour is similar to how climbers are reacting to Nepal's updated Everest regulations, which now strictly requires climbers to complete a 7000-meter climb within Nepal.

Deason et al. (2023) in their studies indicate that the demand for climbing Mount Everest is not fixed; rather, it is highly responsive to changes in environmental conditions, perceived risks, and economic costs. This finding has important policy implications: while stricter regulations may decrease the number of inexperienced climbers and enhance safety, they could also drive climbers to switch to less-regulated peaks instead. For Nepal, understanding these shifts in demand is essential for achieving a balance between safety, environmental sustainability and maintaining long-term competitiveness in the global high-altitude climbing market.

4. Crowding, Regulation, and Behavior

Understanding how climbers respond to crowding and regulation is crucial to predicting the impacts of Nepal's revised permit system. Manning (1999) discusses outdoor recreation, visitor behavior in crowded wilderness environments is shaped not only by physical capacity limits but also by perceptions of crowding, fairness and regulation. In Everest's context, "the human traffic jam" waiting at bottlenecks such as the Hillary Step shows how high demand can transform an expedition into a traffic jam, increasing risks like frostbite, altitude sickness, and even death to alarming rates. Manning's findings suggest that well-designed permit policies can regulate climber flows, reduce crowding and improve climbing experience - strengthening Nepal's reputation as a sustainable and competitive adventure tourism destination.

Huey et al. (2020) statistically tested crowding effects and found surprisingly very limited evidence that crowding increased death probability in their analysis, though they caution that crowding raises other operational hazards and risks such as exhaustion.

Hall & Page (2014) explain this further by situating tourism within broader systems of governance and place management. They show how tourism destinations must constantly negotiate between growth, sustainability and regulation. Their work in tourism geography emphasizes how destinations operate within global competition while managing overcrowding, community impacts and environmental damages. They argue that regulations are a necessity for sustainable growth. Applied to Everest, this means that the challenge is not only the number of climbers but how Nepal manages that flow through permit systems, guide regulations and prerequisites.

Manning (1999) and Hall & Page (2014) show that regulations work best when seen as fair and necessary, while overly strict or weakly enforced rules risk dissatisfaction and danger. For Everest, the 7000m-in-Nepal rule may reduce some climber numbers but also reinforce that only well prepared mountaineers should attempt the peak. Overall, the literature suggests that Everest's new permit regulation will reshape the climbing experience. It influences climber decisions and redistributes demand, this regulation serves as an essential tool for managing safety, promoting environmental sustainability and controlling competition. They are not a simple way to earn money, but a strategic tool to improve safety, protect the environment and regulate competition.

METHODOLOGY:

This study adopts a qualitative methodology in combination with a case comparison and literature synthesis to examine the effects. The core research question remains as to how Nepal's new 7,000m prerequisite and existing Everest permit costs affect its competitiveness in the global high-altitude climbing market, and what is the impact on climber demand and unintended consequences.

1. *Literature-based Analysis:* Drawing on Dwyer and Kim's (2003) model of destination competitiveness as a conceptual framework, the analysis integrates peer-reviewed studies on tourism demand elasticity, mountaineering risk perception, and regulatory impacts with recent policy developments in Nepal's high altitude climbing sector.
2. *Comparative Case Analysis:* Comparative cases are incorporated to contextualise between Everest and three alternative peaks- K2, Denali and Aconcagua. This aligns with Gilchrist et al. 's (2024) framing of Everest as a "global mountain" and makes it an iconic climbing destination in the global climbing market.

These parallels enable a structured assessment of policy effectiveness by considering both intended outcomes – such as enhanced safety and sustainability – and unintended consequences, including shift in climber demand towards alternative destinations.

Case Comparison: Everest vs Other High Peaks

Several research scholars and policy analysts examine how the permit pricing, quotas and governance measures influence volume, operator behaviour and local economies. Commercial mountaineering across the world's highest peaks bring in a vast amount of differences in risk, economics and the way they are guided. Comparative parameters of Everest, other 7000-8000m peaks in Nepal, and non-Himalayan peaks such as K2, Aconcagua and Denali are provided in Table 1.

Park / Region	Height (m)	Permit Cost	Avg Annual Climbers	Success Rate	Fatality Rate	Park Rules	Challenges
Everest (Nepal)	8849	USD 15000 (was 11000)	600-800	60-65%	~1%	Age: Min 16 years	Crowding, Altitude, waste management, climate conditions
Other 8000m Peaks (Nepal)	7000-8200	USD 1800 - 3000	50-150	30-50%	2-5%	Age: Min 16 years	Harsh weather, limited infrastructure
K2 (Pakistan)	8611	USD 3500 - 4000	50-200	~ 25%	~20%	Min age not specified, 18+ typical	Extreme difficulty, limited infrastructure, avalanches
Aconcagua (Argentina)	6961	USD 800-1200	3500+	40-60%	<1%	Age: Min 14+ years with consent	Altitude sickness, Load carry, weather swings
Denali (USA)	6190	USD 350 - 400	1000+	~ 50%	3-4%	Age 12+ recommended, under 18 with guardian	Technical glacier travel, harsh storms, need for high endurance, load carry

Table 1: Comparative Case Analysis

The comparative cases (Everest, Other 8000m peaks inside Nepal, K2, Denali and Aconcagua) were chosen based on three criteria:

- a. Global Significance: Each peak is an epicenter in the Seven Summits or 8000m climbing market.
- b. Policy Variation: They represent diverse governance models: Nepal’s high-cost, permit-intensive Everest; Pakistan’s lightly regulated but dangerous K2; the U.S.’s safety-driven Denali; and Argentina’s mid-priced, mass-market Aconcagua.
- c. Substitution Potential: Each peak is a realistic alternative for climbers halted by Everest’s stricter rules, making them the perfect example for testing substitution behavior.

Drawing from Gilchrist et al. (2024) and official tourism reports, Everest remains the most accessible high-altitude icon in terms of marketing, but the new prerequisite significantly narrows the eligibility pool. In contrast, K2 and Denali rely on inherent difficulties and environmental factors rather than policy restrictions to limit the number of climbers.

FINDINGS AND ANALYSIS

1. Economic Dependence:

Bloomberg News (2020) narrates that Nepal’s reliance on the Everest expedition and Himalayan climbs is unparalleled, Reuters (2023) suggest that mountain climbing and trekking attract thousands of foreigners to Nepal every year, contributing to more than 4% to Nepal’s economy. While the country earned \$5.8m in permit fees - \$5m

from Mount Everest alone for the Mar-May 2023 climbing season, with the permit cost being highest among any of the 8000m peaks. U.S. NPS (2023) indicates that Denali mainly contributes to Alaskan regional economy, UIAA (2023) indicated that Aconcagua primarily supports the Mendoza province in Argentina, and Karim, R. (2023) indicates that the support from K2 in Gilgit-Baltistan to Pakistan's economy is not very significant.

2. Volume of Climbers and Safety Measures:

Arnette (2024) indicates that despite having the highest permit fees, Everest attracts anywhere between 600-800 climbers annually. Its fatality rate of around 1% is relatively low compared with other 8000m peaks, while its success rate remains comparatively high, particularly when contrasted with K2 and other high Himalayan peaks which experience lower summiting rates and higher mortality due to technical difficulty and harsher environmental conditions (Himalayan Database, 2024; Arnette, 2024)

3. Distribution of Sherpa Economy:

The Everest climbing industry is heavily dependent on Sherpas for guiding, load carrying, and rope fixing, providing them with substantial economic opportunities, albeit with considerable occupational risks (Bloomberg News, 2020). Expanding demand for 7000m as a minimum attainment prior to issuance of permit to Everest, will help redistribute economic benefits to other regions and peaks, potentially supporting communities and Sherpa groups that have historically received less income and attention from high altitude expedition, THT Online (2025).

4. Prerequisites and Challenges:

Most high altitude peaks, including Mount Everest, have a minimum age requirement of 16 years for obtaining a climbing permit. In some 7000m peaks, exceptions are granted for younger climbers, contingent upon medical clearance and parental consent (Nepal Ministry of Culture, Tourism and Civil Aviation, 2025). Climbers attempting these peaks must contend with extreme environmental conditions, altitude sickness, technical climbing challenges, and the need for exceptional physical and mental endurance (Himalayan Database, 2024). Despite these demanding prerequisites, a successful ascend of Mount Everest remains highly aspirational, earning its reputation as "roof of the world" and continuing to attract climbers of diverse experience levels from across the globe (Arnette, 2024)

5. Unintended Consequences and Impact to different stakeholders

Nepal's new policy requiring climbers to summit a 7,000 m peak before obtaining an Everest permit aims to enhance safety and manage overcrowding, yet it may produce unintended economic, social, and labor-related consequences across various stakeholder groups.

Impact on Expedition Operators:

Smaller expedition companies may face disproportionate challenges in adapting to the policy. Unlike larger operators with extensive logistical networks, financial reserves, and client bases, smaller firms may struggle to organize additional 7,000 m expeditions, manage increased operational costs, and maintain competitiveness (Dwyer & Kim, 2003). This could lead to market consolidation, where only well-funded operators dominate the Everest industry, potentially reducing diversity in services and pricing options for climbers.

Impact on Local Communities and Sherpa Economy:

Sherpas and high-altitude guides are central to expedition success, yet the policy may redistribute economic benefits to regions hosting the newly required 7,000 m climbs. While this could create opportunities in previously underdeveloped areas, it may also strain local infrastructure and increase occupational risks for Sherpas, who already face significant physical and mental demands at high altitude (Macdonald et al., 2015; Bloomberg News, 2020). Communities that rely indirectly on Everest tourism—such as accommodation providers, porters, and regional businesses—may experience shifts in income that could exacerbate inequalities if some groups are unable to capitalize on the new expeditions.

Broader Environmental and Market Effects:

A potential consequence of stricter Everest requirements is climbers diverting to alternative peaks, both within Nepal and internationally, which could inadvertently transfer overcrowding, environmental pressures, and economic benefits to less-regulated areas. Wealthier, well-prepared climbers and commercial clients are more likely to comply with the new policy. However, climbers who cannot afford additional expeditions may reduce participation, impacting Nepal's long-term competitiveness in the global high-altitude tourism market (Global Rescue, 2025).

Incorporating these multidimensional impacts into policy evaluation provides a more nuanced understanding of the trade-offs involved and highlights the importance of complementary measures, such as supporting small operators, strengthening local infrastructure, and monitoring environmental effects, to ensure equitable and sustainable outcomes.

DISCUSSION

1. Policy effectiveness and safety outcomes:

The primary reason Nepal proposes this new prerequisite purely from the safety of climbers per se. By mandating prior high altitude experience within Nepal, policy makers aim to reduce fatalities that are caused due to inexperience. While this prerequisite shall enhance climber safety and regulate overcrowding on Mount Everest, its effects extend into multiple domains such as Nepal's economy, livelihood of sherpas and the community, and the nation's competitive standing in global mountaineering.

2. Economic trade-offs

This policy has both positive and negative spillovers. On one hand, this will create new demand for climbs of 7000m peaks that shall help distribute tourist inflow away from Everest, spreading the revenue generation. On the other hand, higher permit costs and added requirements may deter budget conscious climbers, potentially reducing the volume of climbers impacting foreign exchange earnings.

3. Nepal's competitive advantage in international mountaineering

The challenge for Nepal lies in balancing safety, competitiveness and sustainability. Historically, the country has been focused on high-volume, affordable cost mountaineering to attract global mountaineers as a strategy. Western countries rely on strong institutional frameworks, rescue services and standardized guide certifications. In the Asia region, Nepal holds a significant brand advantage due to Everest's symbolic status, sherpa expedition and extensive infrastructure.

4. Sherpa's Livelihood and safety considerations

For Sherpas, the rule could lead to both opportunities and trade-offs. On the positive side, the policy could create broader demand for guiding services on underutilized 7,000-metre peaks (e.g., Himlung Himal, Baruntse, or Putha Hiunchuli), redistributing income across regions that have not historically benefitted from Everest tourism. This would reduce over-concentration of risk and economic dependence in Khumbu. On the downside, if overall climber volumes decrease due to higher costs and stricter requirements, aggregate income opportunities could shrink. Sherpas heavily rely on the seasonal influx of climbers and their livelihood heavily dependent on mountaineering expeditions. Nepali sherpas often perform the most dangerous tasks, under conditions of wage inequality compared to foreign guides. While this policy

reforms may spread economic activity, it may also reinforce structural inequities unless paired with better labor protections and insurance reforms

5. International co-operation

Nepal's policy will have an overall effect and this cannot be seen in isolation. Effective governance often requires regional co-operation and alignment with international best practices. International mountaineering organisations provide guidelines for sustainable mountaineering. Nepal could formally integrate into its regulatory systems, rescue standards and climber certifications. When this is done, it may enhance legitimacy, reduce overcrowding in the way, attract responsible climbers, and also reduce fatalities.

6. Implications for Nepal's Long-Term Economic Model

The results suggest that Nepal's reliance on Everest as a premium, high-volume product in its tourism portfolio is being recalibrated. If the 7,000-metre prerequisite successfully shifts demand toward other peaks, Nepal may gradually transition from a single-mountain dependency to a diversified high-altitude economy. This could reduce the economic vulnerability of relying too heavily on Everest expeditions, which are subject to seasonal risks, natural disasters, or global disruptions (e.g., earthquakes, pandemics). However, the model also risks price elasticity effects: higher cumulative costs of climbing (Everest permit + prerequisite climb) may drive budget climbers to alternative destinations like Aconcagua or even to Tibet's north side of Everest, potentially lowering Nepal's competitive advantage.

7. Everest via Tibet as an Alternate Option

A significant unintended consequence of Nepal's 7,000-meter prerequisite may be the diversion of climbers to Tibet's North Col route. Unlike Nepal, China does not impose prior high-altitude experience requirements, and permits are regulated through the China Tibet Mountaineering Association. While this route offers advantages such as direct road access to Base Camp and reduced avalanche risk compared to Nepal's Khumbu Icefall, it presents challenges of stronger winds, harsher conditions, and earlier technical demands. Economically, the shift of climbers to Tibet would redistribute revenue away from Nepalese Sherpa communities and local businesses toward a more centralized Chinese system, weakening Nepal's position in the global mountaineering market. Thus, Nepal's policy, though intended to enhance climber safety, risks creating cross-border competition that could erode its economic benefits.

Outcome 1: Reduction in number of inexperienced climbers by requiring prior experience on a 7000 meter peak in Nepal, the policy aims to reduce the number of expeditions that require rescues and decrease fatalities in high-risk areas.

Outcome 2: Destination Substitution Climbers, particularly from outside of Asia may choose to climb mountains with lesser regulations like K2, Denali or Aconcagua. Alternatively, they could choose to summit Mount Everest via Tibet. This aligns with Falk's findings on substitution in ski tourism where participants switched resorts when access or conditions changed. Similar behaviour is supported by Deason et al. survey-based evidence of destination changes due to tourist's perception of risk.

Short- term effects:

1. Less crowding on Everest's fixed lines
2. Higher revenue for Sherpas per client, but fewer total expeditions could reduce total seasonal employment opportunities

Long- term effects:

1. Stronger Everest brand, safety-first climb
2. More sustainable mountaineering economy built on quality over quantity

POLICY RECOMMENDATIONS:

The policy can potentially reduce fatalities linked to inexperience, redistribute economic benefits to less trafficked 7000m peaks, and create new opportunities for local communities and Sherpa guides. At the same time, the policy produces unequal impacts across stakeholder groups, with smaller expedition operators, budget conscious climbers, and communities heavily dependent on Everest specific tourism facing potential disadvantages. Additionally, the policy may shift climber activity to alternative peaks, potentially transferring environmental pressures and economic benefits elsewhere.

In light of these findings, the following recommendations are proposed:

1. **Stakeholder Consultation and Support:** Policymakers should engage with smaller expedition operators, Sherpas, and local communities to ensure equitable access to new climbing opportunities, financial support for small operators, and adequate labor protections.
2. **Monitoring and Adaptive Management:** Implement a robust monitoring system for environmental impacts, climber distribution, and safety outcomes to adapt policies in real time and prevent unintended ecological or social consequences.
3. **Balanced Economic Incentives:** Consider tiered permit pricing or subsidies for budget-conscious climbers and emerging operators to maintain Nepal's

competitiveness in the global mountaineering market while encouraging safer expeditions.

4. **Education and Training Programs:** Support preparatory high-altitude training programs in Nepal for aspiring climbers, fostering safety awareness, technical competence, and environmentally responsible climbing practices.
5. **International Experience Recognition:** Consider accepting successful ascents of internationally recognized peaks, such as Aconcagua (6,961 m) and Denali (6,190 m), as partial fulfillment of the Everest permit prerequisite, combined with supplementary verification to maintain safety standards.

LIMITATIONS

This study is subject to several limitations. First, it relies entirely on secondary data, including academic literature, government reports, and news sources, limiting insights into real-time climber behavior, stakeholder perceptions, and economic impacts. Second, the comparative case framework cannot fully account for region-specific conditions, such as terrain, logistics, and cultural factors. Third, assumptions regarding economic redistribution, environmental effects, and climber responses are based on observed trends and analogous cases, rather than primary empirical measurement. Finally, perspectives of key stakeholders, particularly smaller operators and local communities, are inferred from literature rather than direct engagement. Despite these limitations, the study provides a conceptual foundation and comparative lens to evaluate policy trade-offs and inform sustainable, safety-focused high-altitude tourism practices.

FURTHER RESEARCH:

Future research could strengthen the evidence base for Nepal's 7,000 m prerequisite policy by incorporating primary empirical data. Surveys and interviews with climbers, Sherpas, and expedition operators would provide granular insights into stakeholder perceptions, economic impacts, and behavioural responses. Longitudinal studies tracking climber flows, success rates, fatalities, and environmental indicators across Everest and alternative peaks could offer robust data on the policy's effectiveness and unintended consequences. Comparative studies examining international high-altitude climbs, such as Aconcagua and Denali, could inform decisions on recognizing prior experience outside Nepal. Finally, research integrating economic modelling with environmental assessments would help quantify trade-offs between revenue generation, local livelihoods, and ecological sustainability, supporting evidence-driven and adaptive policymaking in high-altitude mountaineering tourism.

CONCLUSION:

The 7000m prerequisite policy underscores 3 key takeaways:

- **Safety:** Ensuring climbers have prior high-altitude experience is likely to reduce fatalities and improve preparedness, reinforcing Nepal's position as a responsible mountaineering destination.
- **Economic Impacts:** While the policy redistributes revenue to underdeveloped peaks and supports Sherpa livelihoods, it may challenge smaller operators and budget-conscious climbers, highlighting the need for equitable economic measures.
- **Sustainability:** By managing Everest overcrowding and encouraging tourism to other peaks, the policy has the potential to mitigate environmental degradation, though careful monitoring is essential to avoid shifting pressures elsewhere.

The success of Nepal's new Everest policy rests on striking a careful balance between safety, economics, and sustainability. By mandating 7,000-meter experience, the rules strengthen climber and Sherpa safety while easing overcrowding. Although higher costs may deter some climbers in the short term, they protect Nepal's reputation, sustain community livelihoods, and ensure Everest is seen not as the easiest high peak, but as the safest and most responsibly managed in the world.

Everest will remain the pinnacle of mountaineering not by being open to all, but by being managed as the safest, most responsible, and most sustainable high-altitude destination.

BIBLIOGRAPHY:

Alvado, A., Sorribes, J., & Boyra, J. (2021). The Tourist Destination Management and Its Dynamism: The Case of Barcelona Versus Catalonia. 32(1), 171–188.

<https://doi.org/10.35765/PK.2021.3201.12>

Alpha Business Media ABM (2025, Jun 04). Nepal Tourism in 2025: Renaissance amidst challenges or prolonged stagnation? <https://rss.com/podcasts/alpha-business-media-nepal-commerce-economic-podcast/2087260/>

Arnette, A. (2024, January 20). Everest by the numbers: 2024 edition.

AlanArnette.com. <https://www.alanarnette.com/blog/2024/01/20/everest-by-the-numbers-2024-edition/>

Arnette, A. (2025, Sep 03), Everest just became more expensive and unattractive to some. <https://www.alanarnette.com/blog/2025/09/03/everest-just-became-more-expensive-and-unattractive-to-some/#>

BBC News. (2015, April 26). Nepal earthquake: Hundreds die, many trapped after avalanche on Mount Everest <https://www.bbc.com/news/world-asia-32461019>

BBC News. (2019, May 24). Mount Everest traffic jam: Four more climbers die. <https://www.bbc.com/news/world-asia-48395270>

Bloomberg News (2020, Nov 20) Bloomberg, Unfreezing the Everest Economy <https://www.bloomberg.com/graphics/2020-everest-reopening-sherpa-supply-chain/>

Deason, G., Seekamp, E., Terando, A., & Rojas, C. (2023). Tourist Perceptions of Climate Change Impacts on Mountain Ecotourism in Southern Mexico. *Tourism and Hospitality*, 4(3), 451-466. <https://doi.org/10.3390/tourhosp4030028>

Dwyer, L., & Kim, C. (2003). Destination Competitiveness: Determinants and Indicators. *Current Issues in Tourism*, 6(5), 369–414.

<https://doi.org/10.1080/13683500308667962>

Falk, M. (2013). Winter tourism demand and climate: Empirical evidence from the Austrian ski industry. *Tourism Economics*, 19(4), 817–833.

Fundyus, K. (2021). Climbing Mount Everest: A critical reflection on mountain adventure tourism in Nepal using a population health approach. *Journal of Integrated Studies*, 13(1). Retrieved from <https://jis.athabasca.ca/index.php/jis/article/view/298>

Gilchrist, P., Hansen, P. H., & Westaway, J. (2024). *Other Everests: One mountain, many worlds*. Manchester University Press 2024.

Global Rescue. (2024, Oct 8). Acclimatization Matters: From Mount Everest to Manaslu and Beyond <https://www.globalrescue.com/common/blog/detail/acclimatization-mount-everest-manaslu-himalaya-climbing/>

Global Rescue. (2025, April 4). Mount Everest 2025: Record crowds, rising costs, and a shifting landscape. <https://www.globalrescue.com/common/blog/detail/mount-everest-2025-climbing-travel-update/>

Green Valley Nepal Treks (2025), Nepal Peak Climbing Permits and Fees 2025. <https://www.greenvalleynepaltreks.com/travel-guides/nepal-peak-climbing-permit-and-fees>

Hall, C. M., & Page, S. J. (2014). *The geography of tourism and recreation: Environment, place and space* (4th ed.). London: Routledge.

Hansen, P. H. (2023). Commercialisation and Mount Everest in the twentieth century <https://users.wpi.edu/~phansen/publications/Hansen-2023-commercialisation.pdf>

Hassani, S. ., & Shokouh Saljoughi , R. (2024). Local Development, Over-Tourism and Sustainable Environment: The Case of Mount Everest. *Agricultural Marketing and Commercialization*, 8(2), 190-204. <https://doi.org/10.71735/amc.2024.16829>

Himalayan Database. (2024). Expedition and summit statistics for the Nepal Himalaya. <https://www.himalayandatabase.com>

Himalayan Geographic Research Foundation (2025) Amazing Tourism in the Himalayas: Balancing Economy & Ecology <https://himalayangeographic.com/amazing-tourism-in-the-himalayas/#:~:text=Annual%20tourist%20arrivals%20increased%20from,rate%20of%2017.4%25%20since%202015>

Huey RB, Carroll C, Salisbury R, Wang J-L (2020) Mountaineers on Mount Everest: Effects of age, sex, experience, and crowding on rates of success and death. PLoS ONE 15(8): e0236919. <https://doi.org/10.1371/journal.pone.0236919>

Karim, R. (2023). Economic contribution of tourism in Gilgit-Baltistan, Pakistan. Planning Malaysia Journal. <https://www.planningmalaysia.org/index.php/pmj/article/view/1334>

Macdonald, E. B., Shrestha, S., Chhetri, M. K., Sherpa, L. R., Sherpa, D. G., Murray, K., & Sanati, K. A. (2015). Work-health needs of high-altitude mountain guides (Sherpas) in Nepal – a pilot study. International Journal of Occupational Safety and Ergonomics, 21(1), 9–14. <https://doi.org/10.1080/10803548.2015.1017945>

Manning, R. E. (1999). Studies in outdoor recreation: Search and research for satisfaction (2nd ed.). Corvallis: Oregon State University Press.

Miner, K. R., Mayewski, P. A., Baidya, S. K., Broad, K., Clifford, H., Elmore, A., ... Tuladhar, S. (2020). An overview of physical risks in the Mt. Everest region. One Earth, 3(5), 547–559. <https://doi.org/10.1016/j.oneear.2020.10.008>

National Park and Preserve, Alaska

<https://www.nps.gov/dena/planyourvisit/mountaineering.htm#:~:text=PAYMENT%20Each%20climber%20must%20pay,keeping%20the%20mountain%20environment%20clean.>

Nepal Ministry of Culture, Tourism and Civil Aviation. (2025). Mountaineering and trekking regulations. <https://www.tourism.gov.np/mountaineering-regulations>

Parker, L. (2014, April 18). Deadly avalanche on Everest: Sherpas call off season. National Geographic.

<https://www.nationalgeographic.com/adventure/article/140418-everest-avalanche-sherpas-climbing>

Reuters (2023, May 29), From highs to lows, Everest record breaker sees “no future” in Nepal. <https://www.reuters.com/world/asia-pacific/highs-lows-everest-record-breaker-sees-no-future-nepal-2023-05-29/#:~:text=Mountain%20climbing%20and%20trekking%20attract%20thousands%20of,-%20during%20this%20year's%20March%2DMay%20climbing%20season.>

Reuters (2025, Apr 28), Nepal plans to restrict Everest permits to experienced climbers. <https://www.reuters.com/world/asia-pacific/nepal-plans-restrict-everest-permits-experienced-climbers-2025-04-28/>

Taylor, Ian. (2025, Aug 04), How many people have climbed Mount Everest? <https://iantaylortrekking.com/blog/how-many-people-have-climbed-mount-everest/>

THT Online (2025, Aug 12), Nepal waives permit fees for 97 peaks in remote Karnali and Sudurpaschim. <https://thehimalayantimes.com/nepal/nepal-waives-permit-fees-for-97-peaks-in-remote-karnali-and-sudurpaschim>

The Tourism Times (2025, Jul 28), Nepal earns USD 5.7m in mountaineering royalties in 2024. <https://www.thetourismtimes.com/news/t3-special/nepal-earns-over-usd-57-million-in-mountaineering-royalties-in-2024>

U.S. National Park Service. (2024, September 5). National Park Tourism in Alaska contributes \$2.3 billion to state economy. https://www.nps.gov/orgs/1840/vse_ak_2024.htm

UIAA. (2023). Aconcagua mountain medicine and mountaineering statistics. <https://www.theuiaa.org/mountain-medicine/aconcagua/>

SOURCE FOR FIGURE 1

PMFIAS (2019, Dec 29), Major Mountain Ranges of the World, Highest Mountain Peaks. <https://www.pmfias.com/major-mountain-ranges-world-highest-mountain-peaks/>

SOURCES FOR TABLE 1

Everest (Nepal)

- Reuters. (2025, January 22). Nepal sharply hikes permit fee for Everest climbers. Reuters. <https://www.reuters.com/world/asia-pacific/nepal-sharply-hikes-permit-fee-everest-climbers-2025-01-22/>
- The Guardian. (2025, January 22). Nepal increases permit fee to climb Mount Everest. The Guardian.
- <https://www.theguardian.com/world/2025/jan/22/nepal-increases-permit-fee-climb-mount-everest>
- Arnette, A. (2024, January 20). Everest by the numbers: 2024 edition. AlanArnette.com. <https://www.alanarnette.com/blog/2024/01/20/everest-by-the-numbers-2024-edition/>
- Sabrang India. (2024). Death on Everest: Boom in climbing tourism dangerous and unsustainable. <https://sabrangindia.in/article/death-everest-boom-climbing-tourism-dangerous-and-unsustainable>

Other 8,000 m peaks (Nepal)

- Kathmandu Post. (2025, September 2). New Everest permit fee of \$15,000 takes effect. The Kathmandu Post. <https://kathmandupost.com/money/2025/09/02/new-everest-permit-fee-of-15-000-takes-effect>
- Kathmandu Post. (2025, January 21). Nepal hikes Everest climbing fee to \$15,000. The Kathmandu Post. <https://kathmandupost.com/money/2025/01/21/nepal-hikes-everest-climbing-fee-to-15-000>

K2 (Pakistan)

- ExplorersWeb. (2024, September 13). K2 climbing permits to almost triple in price. <https://explorersweb.com/k2-climbing-permits-to-almost-triple-in-price/>
- K2 Karakoram. (2023). K2 vs. Everest: Which is harder?. <https://k2karakoram.com/k2-vs-everest/>

Aconcagua (Argentina)

- PubMed. (2024). Climber mortality on Mount Aconcagua, 2013–2024. Wilderness & Environmental Medicine. <https://pubmed.ncbi.nlm.nih.gov/40247735/>
- Andes Vertical. (2025). Aconcagua entrance fee rates. <https://www.andes-vertical.com/aconcagua-entrance-fee-rates/>

Denali (USA, Alaska)

- National Park Service (NPS). (2025). Mountaineering – permits and fees. <https://www.nps.gov/dena/planyourvisit/mountaineering.htm>

POLICY REFORMS TO CLIMB MOUNT EVEREST: ECONOMIC, SOCIAL AND SAFETY IMPLICATIONS OF NEPAL'S NEW 7000M PREREQUISITE RULE

ABSTRACT

Mount Everest, the highest peak in the world, attracts hundreds of climbers each year into Nepal. This paper focuses on the regulatory reforms proposed by Nepal ~~in 2025~~ (i) imposing new permit fees ~~to (increase from USD 11000 to USD 15000 from current USD 11000 effective 01 Sep 2025,~~ (ii) prerequisite to summit a 7000m peak in Nepal ~~– under review by Nepal's National Assembly,~~ (iii) fee waiver for a certain peaks ranging up to 7132m for two years to develop least visited western region. These could change climbers' behaviour, manage risk, and support sustainable mountaineering in Nepal. Considering this, the study investigates the impact this policy shift may have on climber demand and destination choices. By connecting permit rules with climbers' decision-making and local economic impacts, this study aims to provide practical strategies for policymakers seeking to balance safety, sustainability, and tourism income on overcrowded peaks. Previous research on adventure tourism highlights growing concerns about overcrowding, waste, and risk on Everest. This research paper combines a comparative analysis of Everest and substitute peaks, with a literature-based ~~study of impacts. estimate of climber substitution behaviour.~~ This paper argues that a well-designed permit system requiring prior high-altitude experience and higher fees would reduce inexperienced climbers, promote safer expeditions, and shift demand toward other peaks such as Aconcagua, Denali, K2 or other 7000/8000m peaks within Nepal. While this reform could increase income for sherpas and porters, reduce risk and minimise low-budget climbs, it may also temporarily reduce job opportunities if overall Everest demand declines as climbers may have to realign their plans when the new rule comes to effect.

Keywords: Mount Everest, High-altitude mountaineering, Everest tourism, Sustainable adventure tourism, Sports economics.

INTRODUCTION

Mount Everest - peak of the world, has been the ultimate symbol of high-altitude mountaineering and one of the most iconic parts of global adventure tourism. Despite its extreme altitude, unpredictable weather conditions and life-threatening risks, this peak attracts hundreds of mountaineers every year, Huey., et al. (2020). Since the landmark ~~summit-first ascent~~ of Sir Edward Hillary and Tenzing Norgay in 1953, Everest has transformed from an Elite exploration to a commercialised industry, ~~with~~ . The rapid growth ~~of-in~~ expeditions ~~on Mount Everest raising es~~ increasing concerns about safety, environmental degradation, overcrowding and ~~long-term~~ sustainability (Hassani & Shokouh Saljoughi, 2024). ~~Despite these~~

challenges, Everest contributes not only to Nepal's cultural identity, but to its economy with climbing alone contributing to a few hundred million dollars and supporting the sherpa livelihoods and the community associated with mountaineering.

Everest industry faces a set of challenges such as crowding on summit routes, inexperienced climbers relying heavily on sherpa support, altitude sickness, risk of avalanches and unpredictable sudden changes in weather (Huey et al., 2020; Miner et al., 2020). The tragic incidents in 2014 and 2015 - when avalanches claimed dozens of lives (Parker, 2014; BBC News, 2015) and the international media portrayal of "traffic jams" in 2019 at Hillary Step further cemented Everest's reputation as both a triumph as well as tragedy of modern adventure tourism (BBC News, 2019). In response to these, the Nepal government announced in 2024 its plan to require climbers to first scale a 7000m peak within Nepal prior to applying for a permit to climb Mt. Everest (Reuters, 2025) beginning 2025. However, this has generated debate among stakeholders - climbers, sherpa guides, expedition companies regarding its feasibility and unintended consequences. This shift in new reforms proposed shows Nepal's firm attitude towards safe and sustainable mountaineering. However, the question remains: how does this new 7000m prerequisite impact Nepal's economy, climbers' preparedness and safety, sherpa's income and sustainable mountaineering? While policy makers may argue that these reforms might be in the best interest of climbers and also Nepal as a safe and sustainable mountaineering destination, this shall provide access to only those who are prepared well, and also reduce international tourists in the short term until they recalibrate their plans.

As a 15years old young mountaineer, I have summited Mt. Elbrus (5642m) in Russia and Mt. Kilimanjaro (5895m) in Tanzania. It is my ambition to summit Mt. Everest as a part of my Seven summits mission that I kickstarted early 2025. These policy reforms by Nepal will have a direct impact on my schedules and I grew curious to further research this topic on the overall implications and the way forward. ¶

According to Fundytus (2021), Everest's loosely regulated permit system lets in many unqualified climbers, which increases the danger while on the mountain and forces Sherpas to take most of the risks for little benefit. Gilchrist et al. (2024) suggests that these pressures have made it harder for Nepal's policymakers as they struggle to balance income from high permit fees with the urgent requirement to manage risk, safety, environmental impact and the mountain's long-term competitiveness as a destination. A part of the main question is whether imposing stricter permit rules could drive away unqualified climbers as the huge amount of people climbing unsafe reduces, while increasing safe, sustainable and higher-value expeditions. Nepal's

~~recent prerequisite estimated to be implemented from 2026 onwards requires climbers to have summited a 7,000m peak within Nepal before attempting Everest shows Nepal's adoption of stricter rules.~~ Insights from Falk (2013) study of climate based shifts in Austrian winter tourism and Deason et al (2023) findings on tourists' view on climate change in Mexican mountain ecotourism both show how changing external factors like environment and/or regulations can push visitors to reconsider their destination choices. ¶

~~This paper firstly reviews existing literature on Everest's crowding, local labor conditions, destination competitiveness, and substitution behavior in adventure tourism. Then, it outlines the mixed methods approach which combines a comparative policy analysis of Everest and other major peaks with an estimation of climber substitution scenarios. The results section shows how Nepal's permit policies require a high altitude experience and higher fees may reduce risk levels for climbing expeditions. This may shift some climber demand to other high altitude peaks such as Aconcagua, Denali, K2 or other 7000/8000m peaks in Nepal which could significantly increase sherpas' earnings. Finally, the paper discusses policy implications for sustainable mountaineering and destination management while concluding with recommendations for balancing safety, sustainability, competitiveness, and local economic impacts in Nepal's adventure tourism sector. Overall, the analysis argues that well-designed permit reforms can be used as a strategic tool to improve safety, enhance destination value and ensure long term sustainability of Nepal's high altitude tourism economy.~~¶

As a 15years old young mountaineer, I have summited Mt. Elbrus (5642m) in Russia "Top of Europe" during April 2025 and Mt. Kilimanjaro (5895m) in Tanzania "Roof of Africa" during June 2025, both of which doesn't have a specific age requirement. I intend to summit Mt. Aconcagua (6961m) in Argentina "Top of South America" during Jan 2026. It is my ambition to summit Mt. Everest when I am 16 as a part of my 7 Summits mission Messner List & Bass List (Figure 1) that I kickstarted early 2025. These policy reforms by Nepal will have a direct impact on my schedule to climb Mount Everest and I grew curious to further research this topic on the overall implications and the way forward.

This paper primarily focuses on the new reforms proposed by Nepal related to the prerequisite to climb a 7000m peak in Nepal, its implications on Mount Everest and other 8000m peaks in Nepal. Scope is limited to Nepal, while comparative insights are made from Pakistan (K2), Argentina (Aconcagua) and USA (Denali). The study ~~primarily also~~ relies on ~~existing literature and~~ secondary data considering that this is a new reform under review, and lack of evidence on long-term impacts.

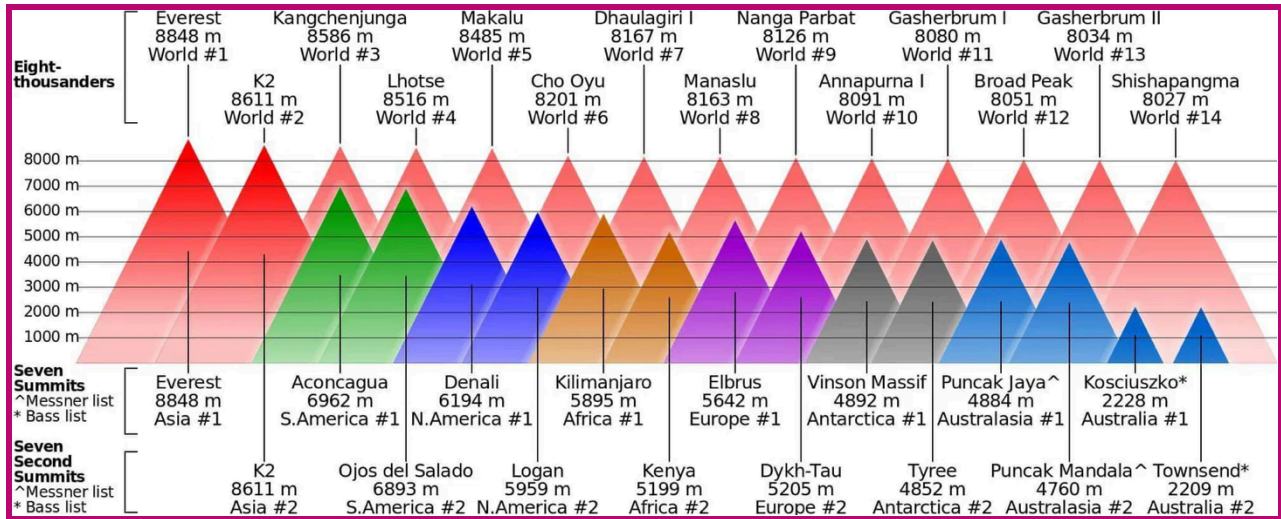


Figure 1 – Highest Mountains on Earth

LITERATURE REVIEW

1. Everest Tourism & Risk

The rapid commercialisation of Everest has increased risks for Sherpas and inexperienced climbers, with Sherpas taking part in life-threatening tasks in harsh weather conditions while their protection and pay still remains insufficient (Fundytus, 2021). As commercial expeditions took over, Mount Everest is now within the reach of less experienced climbers which raises safety concerns for the climbers and the workers. Gilchrist et al. (2024) further explains how Everest has become a crowded stage of national pride, personal ambition and performative achievement - fueled by expanding commercialization and the prestige tied to summiting Everest.

Insights from Hansen, (2023) ; ~~McCurdy, (2014)~~ state that Everest has experienced rapid commercialisation with guided expeditions, according to lower technical entry barriers, and socio-economic access has increased the number and diversity of climbers (by age, nationality, amateur climbers) and expanded operator business models, creating new management and safety challenges.

Everest's overcrowding and accidents is a threat to Nepal's economy: despite tourism contributing about 6.7% to GDP in 2024⁵ (ABM 2025), poor safety and management could harm the country's international reputation, reduce climber demand and weaken the sustainability of relying on mountaineering as a stable growth source. Stronger permit rules and experience requirements are needed to protect both revenue and sustainability.

Collectively, these sources highlight the necessity to reform Everest's permit system by prioritizing Sherpas' safety by strictly restricting inexperienced climbers with stronger prerequisites, long-term sustainability, fairness in their income and tourism policy. The old policy required climbers to have summited at least one peak above 7000 meters before being granted a permit to climb Mount Everest. The revised policy makes this requirement stricter by recognising the "7000-meter peak" only if it is located within Nepal.

Huey., et al. (2020) summarises that a climber having prior high altitude experience may enhance the success rate of a summit to Mount Everest, and in addition climbers with prior experience in climbing peaks in Nepal have higher success rates than those without any experience. This might reflect the direct benefit of adequate experience and rate of success. They further went on to analyse the success and death rates for first-time climbers during period 2006-2019 (3600 climbers with paid permits), using the same statistical methods to climbers during period 1990-2005 (2200 first time climbers), and concluded that two third of climbers now reach the summit, versus one third earlier, and the overall death rate of around 1% hasn't changed. It is also noticed that more women are attempting the climb to Mount Everest in recent years (14.6%) compared to the previous period (9.1%).

2. Destination Competitiveness

Destination competitiveness is influenced by various supporting factors, essential resources and policy mechanisms (Dwyer & Kim, 2003). Their thorough framework emphasises the importance of effective destination management, improving stability, economic benefits and tourist satisfaction. A key concept in this is that policy tools like pricing, regulations, policies and limited access directly have an effect on destination perception, perceived quality and long-term competitiveness.

In this context, Nepal's updated Everest permit policy, which now requires climbers to have summited a 7000-meter peak within Nepal (not just anywhere), presents an example of intentional competitiveness repositioning- to alter its position in the global tourism market in order to improve sustainability, increase revenue or respond to problems like overcrowding. The policy shifts from a loosely enforced prerequisite to one that benefits both Nepal's economy and Sherpa-climber safety. By ensuring that only experienced climbers qualify for an Everest permit, the policy helps reduce the number of unprepared climbers, lowers expedition risk and channels more climbing traffic to Nepal's other high-altitude peaks while generating additional income for local communities. This not only strengthens Nepal's financial stake but in mountaineering tourism by also supporting a safer and more sustainable model for Everest expeditions.

In a comparative analysis of tourism in Barcelona and Catalonia, Alvado et al (2021) illustrates how tourist flow management, product diversification and coordinator public-private strategy can improve resilience and sustainability. Their findings highlight the importance of coordinated leadership and strategic planning - especially in times of crisis - for tourist destinations to remain competitive and sustainable. Applying this to Nepal, the revised policy shows a shift away from mass-market tourism towards a model focused on value, safety, sustainability and experience-driven mountaineering.

3. Climate and Demand patterns

Shifting climate and environmental conditions influence the tourism demand, especially for high altitude destinations such as Mount Everest. Falk (2013) provides empirical evidence from the Austrian ski industry, showing that demand declines when climatic conditions worsen or when prices rise. The study found that visitors adjust their travel plans based on both weather and price, they often choose alternative destinations as a result. Although Falk's work focuses on winter sports, it is similar to high-altitude mountaineering: climbers are likely to adjust their expedition plans, choosing alternative peaks such as K2, Denali or Aconcagua when faced with reduced accessibility or higher costs for Everest **until they are well prepared to meet the regulations and the increased fees.**

Deason et al. (2023) further strengthen this similarity by demonstrating that tourists' perception of environmental risk directly influences destination choice. In their survey of mountain ecotourism in Southern Mexico, they found that negative perceptions of climate change impacts such as safety concerns or degraded conditions which significantly increased the number of visitors switching to other alternative destinations. This behaviour is similar to how climbers are reacting to Nepal's updated Everest regulations, which now strictly requires climbers to complete a 7000-meter climb within Nepal.

Deason et al. (2023) in their ~~The~~ studies indicate that the demand for climbing Mount Everest is not fixed; rather, it is highly responsive to changes in environmental conditions, perceived risks, and economic costs. This finding has important policy implications: while stricter regulations may decrease the number of inexperienced climbers and enhance safety, they could also drive climbers to switch to less-regulated peaks instead. For Nepal, understanding these shifts in demand is essential for achieving a balance between safety, environmental sustainability and maintaining long-term competitiveness in the global high-altitude climbing market.

4. Crowding, Regulation, and Behavior

Understanding how climbers respond to crowding and regulation is crucial to predicting the impacts of Nepal's revised permit system. Manning (1999) discusses outdoor recreation, visitor behavior in crowded wilderness environments is shaped not only by physical capacity limits but also by perceptions of crowding, fairness and regulation. In Everest's context, "the human traffic jam" waiting at bottlenecks such as the Hillary Step shows how high demand can transform an expedition into a traffic jam, increasing risks like frostbite, altitude sickness, and even death to alarming rates. Manning's findings suggest that well-designed permit policies can regulate climber flows, reduce crowding and improve climbing experience - strengthening Nepal's reputation as a sustainable and competitive adventure tourism destination.

Huey et al. (2020) statistically tested crowding effects and found surprisingly very limited evidence that crowding ~~actually increased~~ increased death probability in their analysis, though they caution that crowding raises other operational hazards and risks such as exhaustion.

Hall & Page (2014) explain this further by situating tourism within broader systems of governance and place management. They show how tourism destinations must constantly negotiate between growth, sustainability and regulation. Their work in tourism geography emphasizes how destinations operate within global competition while managing overcrowding, community impacts and environmental damages. They argue that regulations are a necessity for sustainable growth. Applied to Everest, this means that the challenge is not only the number of climbers but how Nepal manages that flow through permit systems, guide regulations and prerequisites.

Manning (1999) and Hall & Page (2014) show that regulations work best when seen as fair and necessary, while overly strict or weakly enforced rules risk dissatisfaction and danger. For Everest, the 7000m-in-Nepal rule may reduce some climber numbers but also reinforce that only well prepared mountaineers should attempt the peak. Overall, the literature suggests that Everest's new permit regulation will reshape the climbing experience. It influences climber decisions and redistributes demand, this regulation serves as an essential tool for managing safety, promoting environmental sustainability and controlling competition. They are not a simple way to earn money, but a strategic tool to improve safety, protect the environment and regulate competition.

METHODOLOGY:

This study research adopts a qualitative mixed method combining qualitative methodology e, literature based frameworks in combination with a supported by secondary data analysis as a case comparison and literature synthesis to examine the effects. The core research question remains as to how Nepal's new 7,000m prerequisite and existing Everest permit costs affect its competitiveness in the global high-altitude climbing market, and what is the impact on climber demand and destination choices unintended consequences.

Using this method for tourism policy research offers a way to combine theoretical concepts with empirical evidence and comparisons of real world cases (Hall & Page, 2014). By applying frameworks for destination competitiveness (Dwyer & Kim, 2003), behavioral research on regulation (Manning, 1999), and empirical studies on substitution (Falk, 2013; Deason et al., 2023), the methodology triangulates these insights to create a small size hypothesis for Everest's future, policy outcomes, competitiveness, tourism scenarios and sustainability. ¶

1. *Literature-based Analysis scenario modeling:* Drawing on Dwyer and Kim's (2003) model of destination competitiveness as a provides conceptual framework, the analysis integrates peer-reviewed studies on tourism demand elasticity, mountaineering risk perception, and regulatory impacts with recent policy developments in Nepal's high altitude climbing sector. emphasizing policy, pricing, safety and sustainability as determinants of a destination's attractiveness. Everest's permit regulations are evaluated using these determinants, to see how competitiveness may shift under the new prerequisite.
2. *Comparative Case Analysis: A structured comparison* Comparative cases are incorporated to contextualise between Everest and three alternative peaks- K2, Denali and Aconcagua. This aligns with Gilchrist et al. 's (2024) framing of Everest as a "global mountain" and makes it an iconic climbing destination in the global climbing market.
3. *Scenario Modeling:* A simple quantitative scenario is constructed to estimate the potential decline in Everest climbers and their redistribution to alternative peaks. Drawing from Falk's (2013) findings on winter tourism, where high cost and limited access directly impacted demand by changing destinations. ¶

¶These parallels enable a structured assessment of policy effectiveness by considering both intended outcomes – such as enhanced safety and sustainability – and unintended consequences, including shift in climber demand towards

alternative destinations rather than testing the study through primary data, the study summarises findings from existing sources and evaluates them through a case comparison.

Case Comparison: Everest vs Other High Peaks

Several research scholars and policy analysts examine how the permit pricing, quotas and governance measures influence volume, operator behaviour and local economies. Commercial mountaineering across the world's highest peaks bring in a vast amount of differences in risk, economics and the way they are guided. ~~Table 1 below outlines the~~ Comparative parameters of Everest, other 7000-8000m peaks in Nepal, and non-Himalayan peaks such as K2, Aconcagua and Denali ~~are provided in~~ **Table 1.**

Mountain	Country	Height (m)	Permit Cost (USD)	Avg Annual Climbers	Success Rate	Park Rules	Challenges
Everest	Nepal	8849	11000-15000	800	50-60%	Age: Min16 years	*Altitude sickness *Weather and Climate conditions *Avalanches *Khumbu Icefall
Manaslu	Nepal	8163	~1000	<500	60-70%	Age: Min16 years	*Altitude sickness *Technical routes *Unpredictable weather and avalanches
Himlung Himal	Nepal	7126	~500	~500	70-80%	Age: Min16 years	*Altitude sickness *Mixed terrain *Unpredictable weather
K2	Pakistan	8611	3500	0-500	~ 25%	Min age not specified	*Technical difficulty *Weather and Climate conditions *Remote location and logistics *Avalanches and rock fall
Aconcagua	Argentina	6961	850-1500	3500-4000	30-40%	Age: Min14 years	*Altitude and Load carry *Extreme cold and high winds *Unpredictable weather * Rugged terrain
Denali	USA	6190	340	1000	~ 50%	Min age not specified	*Extreme cold, technical glacier travel *Unpredictable weather and winds *Altitude sickness, need for high endurance * Heavy load carry

Park / Region	Height (m)	Permit Cost	Avg Annual Climbers	Success Rate	Fatality Rate	Park Rules	Challenges
Everest (Nepal)	8849	USD 15000 (was 11000)	600-800	60-65%	~1%	Age: Min 16 years	Crowding, Altitude, waste management, climate conditions
Other 8000m Peaks (Nepal)	7000-8200	USD 1800 - 3000	50-150	30-50%	2-5%	Age: Min 16 years	Harsh weather, limited infrastructure
K2 (Pakistan)	8611	USD 3500 - 4000	50-200	~ 25%	~20%	Min age not specified, 18+ typical	Extreme difficulty, limited infrastructure, avalanches
Aconcagua (Argentina)	6961	USD 800-1200	3500+	40-60%	<1%	Age: Min 14+ years with consent	Altitude sickness, Load carry, weather swings
Denali (USA)	6190	USD 350 - 400	1000+	~ 50%	3-4%	Age 12+ recommended, under 18 with guardian	Technical glacier travel, harsh storms, need for high endurance, load carry

Table 1: Comparative Case Analysis

The comparative cases (Everest, ~~Manaslu, Himlung Himal~~ Other 8000m peaks inside Nepal, K2, Denali and Aconcagua) were chosen based on three ~~criteria~~ criteria:

- Global Significance: Each peak is an epicenter in the Seven Summits or 8000m climbing market.
- Policy Variation: They represent diverse governance models: Nepal's high-cost, permit-intensive Everest; Pakistan's lightly regulated but dangerous K2; the U.S.'s safety-driven Denali; and Argentina's mid-priced, mass-market Aconcagua.
- Substitution Potential: Each peak is a realistic alternative for climbers halted by Everest's stricter rules, making them the perfect example for testing substitution behavior.

Drawing from Gilchrist et al. (2024) and official tourism reports, Everest remains the most accessible high-altitude icon in terms of marketing, but the new prerequisite significantly narrows the eligibility pool. In contrast, K2 and Denali rely on inherent difficulties and environmental factors rather than policy restrictions to limit the ~~amount~~ number of climbers. ¶

FINDINGS AND ANALYSIS

1. Economic Dependence:

Bloomberg News (2020) narrates that Nepal's reliance on the Everest expedition and Himalayan climbs is unparalleled, Reuters (2023) ~~as estimates~~ suggest that mountain

climbing and trekking attract thousands of foreigners to Nepal every year, contributing to more than 4% to Nepal's economy. While the country earned \$5.8m in permit fees - \$5m from Mount Everest alone for the Mar-May 2023 climbing season ~~this expedition alone contributes to about USD 300m annually to Nepal's economy~~, with the permit cost being highest among any of the 8000m peaks. U.S. NPS (2023) ~~However, comparing this to~~ indicates that Denali ~~which only~~ mainly contributes ~~modestly~~ to Alaskan regional economy, UIAA (2023) indicated that ~~as well as with~~ Aconcagua primarily supports ~~ing~~ the Mendoza province in Argentina, and Karim, R. (2023) indicates that ~~while~~ the support from K2 ~~to~~ in Gilgit-Baltistan to Pakistan's economy is not very significant.

2. Volume of Climbers and Safety Measures:

Arnette (2024) indicates that ~~Despite~~ despite having the highest permit fees, Everest attracts anywhere between 600-800 climbers annually. Its ~~, which is not the case with any other 8000m peaks. The~~ fatality rate of ~~is~~ around 1% is relatively low ~~which is lower~~ compared with ~~than some of the other 8000m peaks, while its and the~~ success rate remains comparatively high, particularly when contrasted with K2 and other high Himalayan peaks which experience lower summiting rates and higher mortality due to technical difficulty and harsher environmental conditions (Himalayan Database, 2024; Arnette, 2024) ~~is high compared with K2 or other 8000m peaks in the region.~~

3. Distribution of Sherpa Economy:

The Everest climbing industry is heavily dependent on Sherpas for guiding, load carrying, and rope fixing, providing them with substantial economic opportunities, albeit with considerable occupational risks (Bloomberg News, 2020). ~~While this industry is fully dependent on Sherpas for guiding, load carrying and rope fixing, it creates economic opportunities as well as occupational risks.~~ Expanding demand for 7000m as a minimum attainment prior to issuance of permit to Everest, will help redistribute economic benefits to other regions and peaks, potentially supporting communities and Sherpa groups that have historically received less income and attention from high altitude expedition, THT Online (2025) ~~the income to some of the other regions that have lacked enough income and attention.~~

4. Prerequisites and Challenges:

Most high altitude peaks, including Mount Everest, ~~and most other high altitude peaks~~ have a minimum age requirement of 16 years for obtaining a climbing permit. In some 7000m peaks ~~to be able to obtain a permit~~, exceptions are granted for younger climbers, contingent upon medical clearance and parental consent (Nepal Ministry of Culture, Tourism and Civil Aviation, 2025). Climbers attempting these peaks must contend with extreme environmental conditions, altitude sickness,

technical climbing challenges , and the need for exceptional physical and mental endurance (Himalayan Database, 2024). Despite these demanding prerequisites, a successful ascend of Mount Everest remains highly aspirational, earning its reputation as “roof of the world” and continuing to attract climbers of diverse experience levels from across the globe (Arnette, 2024)

5. Unintended Consequences and Impact to different stakeholders

Nepal’s new policy requiring climbers to summit a 7,000 m peak before obtaining an Everest permit aims to enhance safety and manage overcrowding, yet it may produce unintended economic, social, and labor-related consequences across various stakeholder groups.

Impact on Expedition Operators:

Smaller expedition companies may face disproportionate challenges in adapting to the policy. Unlike larger operators with extensive logistical networks, financial reserves, and client bases, smaller firms may struggle to organize additional 7,000 m expeditions, manage increased operational costs, and maintain competitiveness (Dwyer & Kim, 2003). This could lead to market consolidation, where only well-funded operators dominate the Everest industry, potentially reducing diversity in services and pricing options for climbers.

Impact on Local Communities and Sherpa Economy:

Sherpas and high-altitude guides are central to expedition success, yet the policy may redistribute economic benefits to regions hosting the newly required 7,000 m climbs. While this could create opportunities in previously underdeveloped areas, it may also strain local infrastructure and increase occupational risks for Sherpas, who already face significant physical and mental demands at high altitude (Macdonald et al., 2015; Bloomberg News, 2020). Communities that rely indirectly on Everest tourism—such as accommodation providers, porters, and regional businesses—may experience shifts in income that could exacerbate inequalities if some groups are unable to capitalize on the new expeditions.

Broader Environmental and Market Effects:

A potential consequence of stricter Everest requirements is climbers diverting to alternative peaks, both within Nepal and internationally, which could inadvertently transfer overcrowding, environmental pressures, and economic benefits to less-regulated areas. Wealthier, well prepared climbers and commercial clients are more likely to comply with the new policy. However, climbers who cannot afford additional expeditions may reduce participation, impacting Nepal’s long-term competitiveness in the global high-altitude tourism market (Global Rescue, 2025).

Incorporating these multidimensional impacts into policy evaluation provides a more nuanced understanding of the trade-offs involved and highlights the importance of complementary measures, such as supporting small operators, strengthening local infrastructure, and monitoring environmental effects, to ensure equitable and sustainable outcomes.

~~and at some other 7000m peaks in some special cases lower age is accepted subject to health verifications and authorisations by both parents. However to summit these peaks, climbers have to face significant challenges as well as exhibiting very high physical and mental endurance. ¶~~

~~However, despite all of these factors, a successful expedition to Everest is very aspirational and remains as the most sought after peak as the “roof of the world” attracting climbers of various experience levels. ¶~~

DISCUSSION

1. Policy effectiveness and safety outcomes:

The primary reason Nepal proposes this new prerequisite purely from the safety of climbers per se. By mandating prior high altitude experience within Nepal, policy makers aim to reduce fatalities that are caused due to inexperience. While this pre-requisite shall enhance climber safety and regulate overcrowding on Mount Everest, its effects extend into multiple domains such as Nepal's economy, livelihood of sherpas and the community, and the nation's competitive standing in global mountaineering.

2. Economic trade-offs

This policy has both positive and negative spillovers. On one hand, this will create new demand for climbs of 7000m peaks that shall help distribute tourist inflow away from Everest, spreading the revenue generation. On the other hand, higher permit costs and added requirements may deter budget conscious climbers, potentially reducing the volume of climbers impacting foreign exchange earnings.

3. Nepal's competitive advantage in international mountaineering

The challenge for Nepal lies in balancing safety, competitiveness and sustainability. Historically, the country has been focused on high-volume, affordable cost mountaineering to attract global mountaineers as a strategy. Western countries rely on strong institutional frameworks, rescue services and standardized guide certifications. In the Asia region, Nepal holds a significant brand advantage due to Everest's symbolic status, sherpa expedition and extensive infrastructure.

4. Sherpa's Livelihood and safety considerations

For Sherpas, the rule could lead to both opportunities and trade-offs. On the positive side, the policy could create broader demand for guiding services on underutilized 7,000-metre peaks (e.g., Himlung Himal, Baruntse, or Putha Hiunchuli), redistributing income across regions that have not historically benefitted from Everest tourism. This would reduce over-concentration of risk and economic dependence in Khumbu. On the downside, if overall climber volumes decrease due to higher costs and stricter requirements, aggregate income opportunities could shrink. Sherpas heavily rely on the seasonal influx of climbers and their livelihood heavily dependent on mountaineering expeditions. ~~While the increase in prerequisites could expand employment opportunities by creating guiding demands on previously under-climbed 7000m peaks. Such diversification across peaks reduces vulnerability from over-reliance on income from Mount Everest alone.~~ Nepali sherpas often perform the most dangerous tasks, under conditions of wage inequality compared to foreign guides. While this policy reforms may spread economic activity, it may also reinforce structural inequities unless paired with better labor protections and insurance reforms

5. International co-operation

Nepal's policy will have an overall effect and this cannot be seen in isolation. Effective governance often requires regional co-operation and alignment with international best practices. International mountaineering organisations provide guidelines for sustainable mountaineering. Nepal could formally integrate into its regulatory systems, rescue standards and climber certifications. When this is done, it may enhance legitimacy, reduce overcrowding in the way, attract responsible climbers, and also reduce fatalities.

6. Implications for Nepal's Long-Term Economic Model

The results suggest that Nepal's reliance on Everest as a premium, high-volume product in its tourism portfolio is being recalibrated. If the 7,000-metre prerequisite successfully shifts demand toward other peaks, Nepal may gradually transition from a single-mountain dependency to a diversified high-altitude economy. This could reduce the economic vulnerability of relying too heavily on Everest expeditions, which are subject to seasonal risks, natural disasters, or global disruptions (e.g., earthquakes, pandemics). However, the model also risks price elasticity effects: higher cumulative costs of climbing (Everest permit + prerequisite climb) may drive budget climbers to alternative destinations like Aconcagua or even to Tibet's north side of Everest, potentially lowering Nepal's competitive advantage.

7. Everest via Tibet as an Alternate Option

A significant unintended consequence of Nepal's 7,000-meter prerequisite may be the diversion of climbers to Tibet's North Col route. Unlike Nepal, China does not impose prior high-altitude experience requirements, and permits are regulated through the China Tibet Mountaineering Association. While this route offers advantages such as direct road access to Base Camp and reduced avalanche risk

compared to Nepal's Khumbu Icefall, it presents challenges of stronger winds, harsher conditions, and earlier technical demands. Economically, the shift of climbers to Tibet would redistribute revenue away from Nepalese Sherpa communities and local businesses toward a more centralized Chinese system, weakening Nepal's position in the global mountaineering market. Thus, Nepal's policy, though intended to enhance climber safety, risks creating cross-border competition that could erode its economic benefits.

Outcome 1: Reduction in number of inexperienced climbers by requiring prior experience on a 7000 meter peak in Nepal, the policy aims to reduce the number of expeditions that require rescues and decrease fatalities in high-risk areas.

Outcome 2: Destination Substitution Climbers, particularly from outside of Asia may choose to climb mountains with lesser regulations like K2, Denali or Aconcagua. **Alternatively, they could choose to summit Mount Everest via Tibet.** This aligns with Falk's findings on substitution in ski tourism where participants switched resorts when access or conditions changed. Similar behaviour is supported by Deason et al. survey-based evidence of destination changes due to tourist's perception of risk.

Short- term effects:

1. Less crowding on Everest's fixed lines
2. Higher revenue for Sherpas per client, but fewer total expeditions could reduce total seasonal employment opportunities

Long- term effects:

1. Stronger Everest brand, safety-first climb
2. More sustainable mountaineering economy built on quality over quantity

POLICY RECOMMENDATIONS: CONCLUSION AND RECOMMENDATIONS

~~The new 7000 meter prerequisite~~ The policy can potentially reduce fatalities linked to inexperience, redistribute economic benefits to less trafficked 7000m peaks, and create new opportunities for local communities and Sherpa guides. At the same time, the policy produces unequal impacts across stakeholder groups, with smaller expedition operators, budget conscious climbers, and communities heavily dependent on Everest specific tourism facing potential disadvantages. Additionally, the policy may shift climber activity to alternative peaks, potentially transferring environmental pressures and economic benefits elsewhere. ~~in Nepal is more than a technical rule it's a strategic repositioning of Everest in the global adventure marketplace. By favoring skilled, higher value climbers, Nepal may improve safety~~

~~and sustainability while reinforcing its competitive advantage. However, this will require carefully balancing market share, destination reputation, safety standards and economic stability. Permit policies are a strong tool for shaping the future of tourism, environmental integrity and social equity in the Himalayas.~~

In light of these findings, the following recommendations are proposed:

1. **Stakeholder Consultation and Support:** Policymakers should engage with smaller expedition operators, Sherpas, and local communities to ensure equitable access to new climbing opportunities, financial support for small operators, and adequate labor protections.
2. **Monitoring and Adaptive Management:** Implement a robust monitoring system for environmental impacts, climber distribution, and safety outcomes to adapt policies in real time and prevent unintended ecological or social consequences.
3. **Balanced Economic Incentives:** Consider tiered permit pricing or subsidies for budget-conscious climbers and emerging operators to maintain Nepal's competitiveness in the global mountaineering market while encouraging safer expeditions.
4. **Education and Training Programs:** Support preparatory high-altitude training programs in Nepal for aspiring climbers, fostering safety awareness, technical competence, and environmentally responsible climbing practices.
5. **International Experience Recognition:** Consider accepting successful ascents of internationally recognized peaks, such as Aconcagua (6,961 m) and Denali (6,190 m), as partial fulfillment of the Everest permit prerequisite, combined with supplementary verification to maintain safety standards.

LIMITATIONS

This study is subject to several limitations. First, it relies entirely on secondary data, including academic literature, government reports, and news sources, limiting insights into real-time climber behavior, stakeholder perceptions, and economic impacts. Second, the comparative case framework cannot fully account for region-specific conditions, such as terrain, logistics, and cultural factors. Third, assumptions regarding economic redistribution, environmental effects, and climber responses are based on observed trends and analogous cases, rather than primary empirical measurement. Finally, perspectives of key stakeholders, particularly smaller operators and local communities, are inferred from literature rather than direct engagement. Despite these limitations, the study provides a conceptual foundation and comparative lens to evaluate policy trade-offs and inform sustainable, safety-focused high-altitude tourism practices.

FURTHER RESEARCH:

Future research could strengthen the evidence base for Nepal's 7,000 m prerequisite policy by incorporating primary empirical data. Surveys and interviews with climbers, Sherpas, and expedition operators would provide granular insights into stakeholder perceptions, economic impacts, and behavioural responses. Longitudinal studies tracking climber flows, success rates, fatalities, and environmental indicators across Everest and alternative peaks could offer robust data on the policy's effectiveness and unintended consequences. Comparative studies examining international high-altitude climbs, such as Aconcagua and Denali, could inform decisions on recognizing prior experience outside Nepal. Finally, research integrating economic modelling with environmental assessments would help quantify trade-offs between revenue generation, local livelihoods, and ecological sustainability, supporting evidence-driven and adaptive policymaking in high-altitude mountaineering tourism.

CONCLUSION:

The 7000m prerequisite policy underscores 3 key takeaways:

- **Safety:** Ensuring climbers have prior high-altitude experience is likely to reduce fatalities and improve preparedness, reinforcing Nepal's position as a responsible mountaineering destination.
- **Economic Impacts:** While the policy redistributes revenue to underdeveloped peaks and supports Sherpa livelihoods, it may challenge smaller operators and budget-conscious climbers, highlighting the need for equitable economic measures.
- **Sustainability:** By managing Everest overcrowding and encouraging tourism to other peaks, the policy has the potential to mitigate environmental degradation, though careful monitoring is essential to avoid shifting pressures elsewhere.

The success of Nepal's new Everest policy rests on striking a careful balance between safety, economics, and sustainability. By mandating 7,000-meter experience, the rules strengthen climber and Sherpa safety while easing overcrowding. Although higher costs may deter some climbers in the short term, they protect Nepal's reputation, sustain community livelihoods, and ensure Everest is seen not as the easiest high peak, but as the safest and most responsibly managed in the world.

Everest will remain the pinnacle of mountaineering not by being open to all, but by being managed as the safest, most responsible, and most sustainable high-altitude destination.

- ~~1. Adjust permit fees based on demand and other factors to increase revenue while maintaining accessibility.¶~~
- ~~2. Promote other mountain peaks in Nepal to attract climbers affected by the 7000 meter prerequisite while reducing Everest's traffic.¶~~
- ~~3. Implement a strict system to verify climber's qualifications and past experience before they are allowed to climb.¶~~
- ~~4. Establish training programs in Nepal's 6000/7000m peaks (ie. Ama Dablam and Himlung Himal). This would allow new climbers to meet the prerequisites of climbing Everest, while keeping the economic benefits in Nepal.¶~~
- ~~5. Promote Nepal as a destination for progressive mountaineering journeys rather than just Everest attempts — reframing competitiveness around sustainability.¶~~
- ~~6. Mandate minimum wage standards and insurance coverage for all expedition workers and to also ensure income stability even if total climber numbers reduce.¶~~
- ~~7. Use real time online booking and quotas on daily routes to avoid traffic on summit days, especially on the Hillary step.¶~~
- ~~8. To promote sustainable practices, expeditions will be required to pay an environmental bond. The bond will be refunded upon proof that they have removed all their waste.¶~~
- ~~9. Establish a clear timeline as to when the policy will be in force, as this will help the global mountaineering community to equip themselves and plan accordingly to meet this new requirement.¶~~
- ~~10. Accepting international experience at Aconcagua, Denali or K2 as a qualifying criteria for a certain period to obtain the Everest permit.¶~~

BIBLIOGRAPHY:

Alvado, A., Sorribes, J., & Boyra, J. (2021). The Tourist Destination Management and Its Dynamism: The Case of Barcelona Versus Catalonia. 32(1), 171–188.

<https://doi.org/10.35765/PK.2021.3201.12>

Alpha Business Media ABM (2025, Jun 04). Nepal Tourism in 2025: Renaissance amidst challenges or prolonged stagnation?

<https://rss.com/podcasts/alpha-business-media-nepal-commerce-economic-podcast/2087260/>

Arnette, A. (2024, January 20). Everest by the numbers: 2024 edition.

AlanArnette.com.

<https://www.alanarnette.com/blog/2024/01/20/everest-by-the-numbers-2024-edition/>

Arnette, A. (2025, Sep 03), Everest just became more expensive and unattractive to some.

<https://www.alanarnette.com/blog/2025/09/03/everest-just-became-more-expensive-and-unattractive-to-some/#>

BBC News. (2015, April 26). Nepal earthquake: Hundreds die, many trapped after avalanche on Mount Everest <https://www.bbc.com/news/world-asia-32461019>

BBC News. (2019, May 24). Mount Everest traffic jam: Four more climbers die.

<https://www.bbc.com/news/world-asia-48395270>

Bloomberg News (2020, Nov 20) Bloomberg, Unfreezing the Everest Economy

<https://www.bloomberg.com/graphics/2020-everest-reopening-sherpa-supply-chain/>

Deason, G., Seekamp, E., Terando, A., & Rojas, C. (2023). Tourist Perceptions of Climate Change Impacts on Mountain Ecotourism in Southern Mexico. *Tourism and Hospitality*, 4(3), 451-466. <https://doi.org/10.3390/tourhosp4030028>

Dwyer, L., & Kim, C. (2003). Destination Competitiveness: Determinants and Indicators. *Current Issues in Tourism*, 6(5), 369-414.

<https://doi.org/10.1080/13683500308667962>

Falk, M. (2013). Winter tourism demand and climate: Empirical evidence from the Austrian ski industry. *Tourism Economics*, 19(4), 817-833.

Fundytus, K. (2021). Climbing Mount Everest: A critical reflection on mountain adventure tourism in Nepal using a population health approach. *Journal of Integrated Studies*, 13(1). Retrieved from

<https://jis.athabasca.ca/index.php/jis/article/view/298>

Gilchrist, P., Hansen, P. H., & Westaway, J. (2024). *Other Everests: One mountain, many worlds*. Manchester University Press 2024.

Global Rescue. (2024, Oct 8). Acclimatization Matters: From Mount Everest to Manaslu and Beyond

<https://www.globalrescue.com/common/blog/detail/acclimatization-mount-everest-manaslu-himalaya-climbing/>

Global Rescue. (2025, April 4). Mount Everest 2025: Record crowds, rising costs, and a shifting landscape.

<https://www.globalrescue.com/common/blog/detail/mount-everest-2025-climbing-travel-update/>

Green Valley Nepal Treks (2025), Nepal Peak Climbing Permits and Fees 2025.

<https://www.greenvalleynepaltreks.com/travel-guides/nepal-peak-climbing-permit-and-fees>

Hall, C. M., & Page, S. J. (2014). *The geography of tourism and recreation: Environment, place and space* (4th ed.). London: Routledge.

Hansen, P. H. (2023). Commercialisation and Mount Everest in the twentieth century <https://users.wpi.edu/~phansen/publications/Hansen-2023-commercialisation.pdf>

Hassani, S. ., & Shokouh Saljoughi , R. (2024). Local Development, Over-Tourism and Sustainable Environment: The Case of Mount Everest. *Agricultural Marketing and Commercialization*, 8(2), 190-204. <https://doi.org/10.71735/amc.2024.16829>

Himalayan Database. (2024). Expedition and summit statistics for the Nepal Himalaya. <https://www.himalayandatabase.com>

Himalayan Geographic Research Foundation (2025) *Amazing Tourism in the Himalayas: Balancing Economy & Ecology*

<https://himalyanageographic.com/amazing-tourism-in-the-himalayas/#:~:text=Annual%20tourist%20arrivals%20increased%20from,rate%20of%2017.4%25%20since%202015>

Huey RB, Carroll C, Salisbury R, Wang J-L (2020) Mountaineers on Mount Everest: Effects of age, sex, experience, and crowding on rates of success and death. *PLoS ONE* 15(8): e0236919. <https://doi.org/10.1371/journal.pone.0236919>

Karim, R. (2023). Economic contribution of tourism in Gilgit-Baltistan, Pakistan. *Planning Malaysia Journal*.

<https://www.planningmalaysia.org/index.php/pmj/article/view/1334>

Macdonald, E. B., Shrestha, S., Chhetri, M. K., Sherpa, L. R., Sherpa, D. G., Murray, K., & Sanati, K. A. (2015). Work-health needs of high-altitude mountain guides (Sherpas) in Nepal – a pilot study. *International Journal of Occupational Safety and Ergonomics*, 21(1), 9–14. <https://doi.org/10.1080/10803548.2015.1017945>

Manning, R. E. (1999). *Studies in outdoor recreation: Search and research for satisfaction* (2nd ed.). Corvallis: Oregon State University Press.

Miner, K. R., Mayewski, P. A., Baidya, S. K., Broad, K., Clifford, H., Elmore, A., ...

Tuladhar, S. (2020). An overview of physical risks in the Mt. Everest region. *One Earth*, 3(5), 547–559. <https://doi.org/10.1016/j.oneear.2020.10.008>

National Park and Preserve, Alaska

<https://www.nps.gov/dena/planyourvisit/mountaineering.htm#:~:text=PAYMENT:>

[%20Each%20climber%20must%20pay,keeping%20the%20mountain%20environmen
t%20clean.](#)

Nepal Ministry of Culture, Tourism and Civil Aviation. (2025). Mountaineering and trekking regulations. <https://www.tourism.gov.np/mountaineering-regulations>

Parker, L. (2014, April 18). Deadly avalanche on Everest: Sherpas call off season. National Geographic.

<https://www.nationalgeographic.com/adventure/article/140418-everest-avalanche-sherpas-climbing>

Reuters (2023, May 29), From highs to lows, Everest record breaker sees “no future” in Nepal.

<https://www.reuters.com/world/asia-pacific/highs-lows-everest-record-breaker-sees-no-future-nepal-2023-05-29/#:~:text=Mountain%20climbing%20and%20trekking%20attract%20thousands%20of,-%20during%20this%20year's%20March%20May%20climbing%20season.>

Reuters (2025, Apr 28), Nepal plans to restrict Everest permits to experienced climbers.

<https://www.reuters.com/world/asia-pacific/nepal-plans-restrict-everest-permits-experienced-climbers-2025-04-28/>

Taylor, Ian. (2025, Aug 04), How many people have climbed Mount Everest?

<https://iantaylortrekking.com/blog/how-many-people-have-climbed-mount-everest/>

THT Online (2025, Aug 12), Nepal waives permit fees for 97 peaks in remote Karnali and Sudurpaschim.

<https://thehimalayantimes.com/nepal/nepal-waives-permit-fees-for-97-peaks-in-remote-karnali-and-sudurpaschim>

The Tourism Times (2025, Jul 28), Nepal earns USD 5.7m in mountaineering royalties in 2024.

<https://www.thetourismtimes.com/news/t3-special/nepal-earns-over-usd-57-million-in-mountaineering-royalties-in-2024>

U.S. National Park Service. (2024, September 5). National Park Tourism in Alaska contributes \$2.3 billion to state economy.

https://www.nps.gov/orgs/1840/vse_ak_2024.htm

UIAA. (2023). Aconcagua mountain medicine and mountaineering statistics.

<https://www.theuiaa.org/mountain-medicine/aconcagua/>

SOURCE FOR FIGURE 1

PMFIAS (2019, Dec 29), Major Mountain Ranges of the World, Highest Mountain Peaks.

<https://www.pmfias.com/major-mountain-ranges-world-highest-mountain-peaks/>

SOURCES FOR TABLE 1

Everest (Nepal)

- Reuters. (2025, January 22). Nepal sharply hikes permit fee for Everest climbers. Reuters.
<https://www.reuters.com/world/asia-pacific/nepal-sharply-hikes-permit-fee-everest-climbers-2025-01-22/>
- The Guardian. (2025, January 22). Nepal increases permit fee to climb Mount Everest. The Guardian.
<https://www.theguardian.com/world/2025/jan/22/nepal-increases-permit-fee-climb-mount-everest>
- Arnette, A. (2024, January 20). Everest by the numbers: 2024 edition. AlanArnette.com.
<https://www.alanarnette.com/blog/2024/01/20/everest-by-the-numbers-2024-edition/>
- Sabrang India. (2024). Death on Everest: Boom in climbing tourism dangerous and unsustainable.
<https://sabrangindia.in/article/death-everest-boom-climbing-tourism-dangerous-and-unsustainable>

Other 8,000 m peaks (Nepal)

- Kathmandu Post. (2025, September 2). New Everest permit fee of \$15,000 takes effect. The Kathmandu Post.

<https://kathmandupost.com/money/2025/09/02/new-everest-permit-fee-of-15-000-takes-effect>

- Kathmandu Post. (2025, January 21). Nepal hikes Everest climbing fee to \$15,000. The Kathmandu Post.

<https://kathmandupost.com/money/2025/01/21/nepal-hikes-everest-climbing-fee-to-15-000>

K2 (Pakistan)

- ExplorersWeb. (2024, September 13). K2 climbing permits to almost triple in price.

<https://explorersweb.com/k2-climbing-permits-to-almost-triple-in-price/>

- K2 Karakoram. (2023). K2 vs. Everest: Which is harder?.

<https://k2karakoram.com/k2-vs-everest/>

Aconcagua (Argentina)

- PubMed. (2024). Climber mortality on Mount Aconcagua, 2013–2024. Wilderness & Environmental Medicine.

<https://pubmed.ncbi.nlm.nih.gov/40247735/>

- Andes Vertical. (2025). Aconcagua entrance fee rates.

<https://www.andes-vertical.com/aconcagua-entrance-fee-rates/>

Denali (USA, Alaska)

- National Park Service (NPS). (2025). Mountaineering – permits and fees.

<https://www.nps.gov/dena/planyourvisit/mountaineering.htm>

Overall, this is an ambitious and timely piece that tackles an important contemporary issue in adventure tourism policy. The author's personal connection to mountaineering adds authenticity to the work, and the topic is certainly relevant given the ongoing debates about Everest's commercialization and safety concerns.

The paper demonstrates solid research effort and tackles a complex policy issue from multiple angles. The comparative analysis framework is well-conceived, and the author shows familiarity with relevant academic literature spanning tourism economics, destination competitiveness, and adventure tourism management. The integration of theoretical frameworks from Dwyer & Kim (2003) on destination competitiveness with empirical insights from studies on substitution behavior shows sophisticated thinking for a high school research project.

However, there are several areas where the paper would benefit from revision. The most significant issue is the reliance entirely on secondary sources and theoretical modeling without primary data collection or stakeholder interviews. While this is understandable given the author's circumstances, it limits the depth of analysis and makes some conclusions feel speculative. For instance, the assumptions about climber behavior and economic impacts would be much stronger with survey data from actual climbers, expedition companies, or Sherpa communities.

Response: *Thanks for your feedback, and I completely agree that the paper has been based on secondary sources given the circumstance. I have taken note of this and made suitable changes in the revised paper. I have also included primary research as a "Further Research" possibility. I intend to do the survey and discussions with actual climbers, expedition companies and sherpa community during my expedition to Mt. Everest, which could be published as a further research paper.*

The methodology section needs strengthening. The "mixed-methods" approach described is essentially a literature review combined with comparative case analysis, which isn't truly mixed-methods research. The scenario modeling mentioned lacks sufficient detail about assumptions and calculations. The author should be more transparent about the limitations of this approach and perhaps reframe the methodology more accurately.

Response: *This has been updated to indicate that the paper is based on literature review as well as a case comparison. The word mixed-method research has been removed, and scenario-modelling has been removed as they don't seem to be the case for this paper, and I realise that. I have also included a separate section on Limitations, that describe the limitations of this study.*

The economic analysis, while interesting, relies on some questionable figures. The claim that Everest contributes "a few hundred million dollars" to Nepal's economy needs better documentation, and the \$300 million annual figure cited later appears inconsistent with other sources. These numbers are crucial to the argument and need more rigorous sourcing.

Response: The word “few million dollars” as well as USD 300m has been removed. Information sourced from Reuters (2023), suggests that 4% contribution to Nepal’s economy comes from mountain climbing and trekking, and a big portion of the contribution comes from Mt. Everest. Also, the dependence of Nepal’s economy on Himalayas and Mt. Everest is included from Bloomberg News (2020).

The paper would benefit from more critical analysis of potential unintended consequences. While the author acknowledges some trade-offs, there's insufficient discussion of how the policy might affect different stakeholder groups differently. For example, how might smaller expedition companies fare compared to larger operators? What about the impact on local communities beyond the Sherpa population?

Response: A separate section to address unintended consequences has been included in the “Findings and Analysis” section. It covers three areas: Impact on expedition operators, impact on local communities and sherpa economy as well as impact on broader environmental and market effects.

The writing, while generally clear, suffers from some organizational issues. The introduction is quite long and could be more focused. Some sections repeat information unnecessarily, and the transition between different analytical components could be smoother.

Response: Introduction session has been revised and shortened. Repeat information has also been removed to a maximum extent.

The recommendations section, while comprehensive, reads more like a wish list than evidence-based policy suggestions tied directly to the analysis.

Response: This has now been updated with a 5-pointer high level recommendation

There are also some factual concerns that need addressing. The author states they are 15 years old but mentions summiting peaks that typically have minimum age requirements. This raises questions about the personal narrative's accuracy. Additionally, some technical details about mountaineering regulations and permit systems could use verification from official sources.

Response: This section has been updated to clarify that some of the mountains such as Kilimanjaro and Elbrus that I submitted do not have a pre-defined age criterion. A separate section has been created at end of the paper to include details of sources for the case comparison as well as mountaineering regulations and permit systems

The comparative table is useful but needs more careful formatting and source attribution. Some of the data appears outdated or inconsistent across different cells, which undermines its analytical value.

Response: *Table has been updated, and a separate section has been created at end of the paper to include details of sources for the case comparison as well as mountaineering regulations and permit systems*

Despite these limitations, the paper shows real promise. The author demonstrates genuine passion for the subject and has identified an important policy issue that deserves academic attention. The basic analytical framework is sound, and many of the insights about destination competitiveness and climber behavior are perceptive.

I would recommend major revision with the following priorities:

first, strengthen the methodology section with more honest acknowledgment of limitations;

COMPLETED

second, verify and properly source all economic and statistical claims;

COMPLETED

third, reorganize the paper to reduce redundancy and improve flow; and

COMPLETED

fourth, deepen the critical analysis of policy implications with more attention to different stakeholder perspectives.

COMPLETED

With these revisions, this could become a solid contribution to the literature on adventure tourism policy. The author should also consider narrowing the scope slightly to allow for deeper analysis of fewer issues rather than the current broad approach. For a high school journal, this represents ambitious and thoughtful work that with revision could serve as an excellent foundation for further research in this area.

Referee Report

This is an ambitious and engaging paper that takes on a very topical subject: Nepal's recent policy reforms around climbing Mount Everest. The author has selected a fascinating issue with wide-ranging economic, social, and safety implications, and the paper succeeds in showing why these new rules matter not just to climbers but also to sherpas, policymakers, and the broader tourism economy. The writing is clear, the structure is logical, and the author shows a genuine passion for the subject.

One of the strengths of the paper is the breadth of perspectives it brings together. The author doesn't just describe the policy; he connects it to debates on sustainability, substitution effects in tourism, and the role of sherpas in the mountaineering economy. The comparative element, looking at K2, Denali, and Aconcagua, adds useful context and shows an awareness that Everest does not exist in isolation. For a student paper, this demonstrates strong initiative and research effort.

There are, however, a few areas that could be improved before publication. At times the paper leans heavily on descriptive background, and the main argument could be drawn out more sharply.

***Response:** Thanks for your feedback, and I completely agree that the paper has been based on secondary sources given the circumstance. I have taken note of this and made suitable changes in the revised paper. I have also included primary research as a "Further Research" possibility and have also included a section on "Limitations". I intend to do the survey and discussions with actual climbers, expedition companies and sherpa community during my expedition to Mt. Everest, which could be published as a further research paper.*

For instance, the sections on Everest's history and commercialization are informative but repeat points already familiar from the literature; trimming them slightly would keep the focus on the new 7000m prerequisite.

***Response:** Introduction section has been revised and shortened. Repeat information has also been removed to a maximum extent.*

In the findings, the author could also go beyond summarizing to make the interpretation more explicit: what do the results imply for Nepal's long-term economic model, and how might sherpas' livelihoods realistically change under these rules?

***Response:** A separate section to address unintended consequences has been included in the "Findings and Analysis" section. It covers three areas: Impact on expedition operators, impact on local communities and sherpa economy as well as impact on broader environmental and market effects. On the discussion section, Implications for Nepal's Longterm economic model as well as Sherpa's livelihood and safety considerations have been included.*

A second point is that the paper would benefit from more consistent citation practice. Some references are used very effectively (for example, Falk 2013 and Deason et al. 2023 on substitution effects), but elsewhere the claims are more general and could use clearer sourcing.

Adding one or two recent policy or news sources from Nepal itself would strengthen the credibility of the argument.

***Response:** Appropriate sourcing has been done, and they have now been referenced as much as possible. Also, news articles/sources from Nepal have been included.*

Finally, the conclusion is thoughtful but could be sharpened. Right now, it reads like a list of recommendations. Instead, the author might highlight two or three main takeaways, perhaps one about safety, one about economics, and one about sustainability, and explain briefly why they matter most.

***Response:** Policy recommendations has now been updated with a 5 pointer high level recommendation, and the conclusion has been sharpened focusing on the 3 areas indicated – safety, economics and sustainability.*

Overall, this is a very promising submission. It is well within the range of publishable quality for a student journal, and with some revisions, mainly tightening the background, strengthening the interpretation, and polishing the conclusion, I would recommend it for publication. My recommendation is minor revision.