

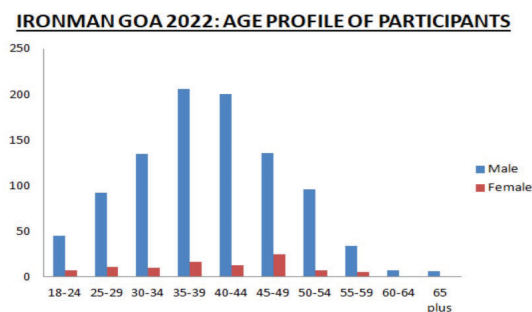
# Endurance Sports: Road to Fitness Consciousness and Societal Health

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## 1. Introduction

The Ironman triathlon is considered one of the most demanding endurance races globally, encompassing long-distance swimming, cycling, and running. Completing this event requires exceptional fitness and dedication. In November 2022, India hosted its second Iron Man 70.3 race in Goa. Participants faced a gruelling challenge: a 1.9 km sea swim, followed by 90 km of cycling, and a half marathon, all to be completed within eight and a half hours.

The eagerly anticipated race, for which I had also registered, took place on November 13, 2022, at Miramar Beach in Goa. With over 1000 participants, Ironman Goa was an unforgettable experience. Fitness enthusiasts from various parts of the country converged in Goa, although there were relatively few professional athletes among them. Completing the race gave me an immense sense of accomplishment, but it also led me to ponder the growing popularity of endurance events in India. An analysis of the participants' age profile revealed some intriguing trends. The number of participants over 35 significantly outnumbered those under 35, with a substantial contingent over the age of 45. Nearly 100 women participated. The chart below provides details of the age profile of participants in Ironman Goa 2022.



**Figure 1:** Ironman Goa 2022 Participation Graph generated by the author after detailed analysis of complete results

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## **2. Growing popularity of Endurance Events in India**

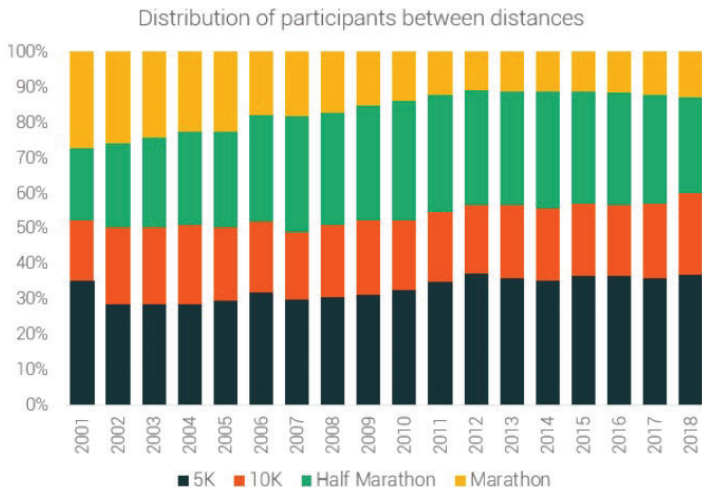
Participation in fitness events in India has steadily increased over the years. Running stands out as the most popular, with common events including 5 km, 10 km, and half-marathon runs. There are also walking events and events designed for women and children. India's endurance sports scene has evolved significantly, starting with only one organized marathon event in 2003. In 2018, India hosted nearly 1400 timed events, accommodating approximately one million registered runners. This figure has continued to grow, reaching a total of approximately 1580 events by 2022, contributing to a \$400 million industry.

The Mumbai Marathon stands out as the most popular event in India, a remarkable sporting extravaganza. The 18th edition of the Mumbai Marathon, concluded recently, attracted over 55,000 participants across various categories. Over the last decade, the number of full marathon runners in Mumbai has surged by almost 1200%.

The half marathon, covering a distance of 21.1 km, is also gaining popularity and sees increasing participation from men and women of all age groups. Most reasonably fit individuals can complete this distance with some preparation. However, a half marathon is not considered an extreme endurance event, unlike the full marathon, which requires prolonged training and a high level of dedication. Participation in full marathons and longer distances is also steadily increasing.

## **3. Worldwide and Indian trends in Endurance Sports**

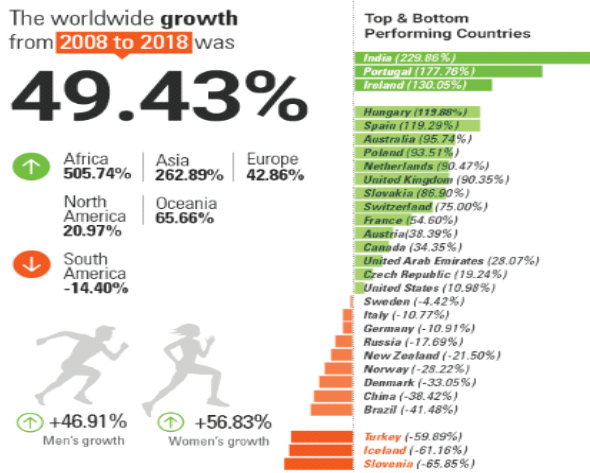
At this point, it is worth examining worldwide trends in running to draw comparisons with the Indian scenario. The chart below illustrates the distribution of participants in various running events.



**Figure 2:** Percent-wise distribution of Participants in various distances.  
*Source: Marathon Statistics 2019 Worldwide, runrepeat.com*

It is evident from the analysis that the number of people participating in half and full marathons constitutes nearly 50% of the runners in organised events. Additionally, a significantly larger number of individuals take part in 10 km and longer events compared to 5 km runs.

Worldwide trends in full marathons for the period from 2008 to 2018 clearly indicate that India is the fastest-growing marathon destination in the world, with a staggering increase of nearly 230% in this decade. This analysis was conducted by two researchers, Jens Jakob Andersen and Vania Nikolova, based on 19,614,975 marathon results from 2008 to 2018, gathered from 32,335 races across various countries. While the general trend is towards an increase in the number of participants in full marathons, there are a few countries that have shown a decline in numbers.



**Figure 3.** The Growth in popularity of Marathon Running.

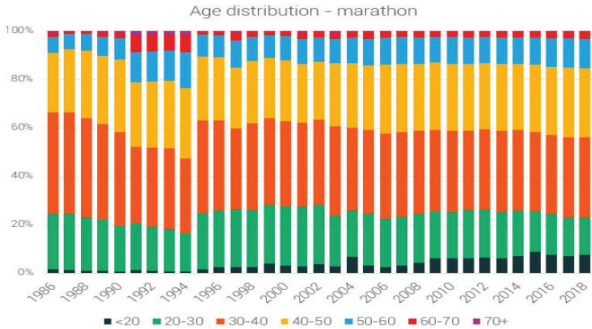
*Source: Marathon Statistics Worldwide 2019, runrepeat.com*

The analysis has some interesting findings. The overall growth is about 50%, but the number of women participating increased by almost 10% more than men. In 2018, around 1.3 million people completed a full marathon, and 32% of them were women, which is a small increase. The average age of the finishers in 2018 was 39.2 years, up by over four years from 2008. Most participants were from the USA, with over 450,000 out of the 1.3 million finishers. India had the biggest growth in participation but was slower on average. On average, Indian participants took a little over 5 hours to finish a full marathon, while the global average was about 4 ½ hours.

Apart from full marathons, India is seeing a rise in extreme endurance events that test people's limits. These events include ultra-marathons and trail races that are longer than regular marathons. Some well-known examples are La Ultra and Khardungla Challenge in Ladakh, Malanad Ultra in Karnataka, Vagamon Ultra in Kerala, and the Border Run in Jaisalmer. In these races, people cover distances from 50 km to over 300 km. There's also something called the stadium challenge, where individuals or groups run on a stadium track for 2 to 24 hours without stopping. Triathlon events, which involve swimming, cycling, and running, are also becoming more popular in various formats, including very tough Iron Man events.

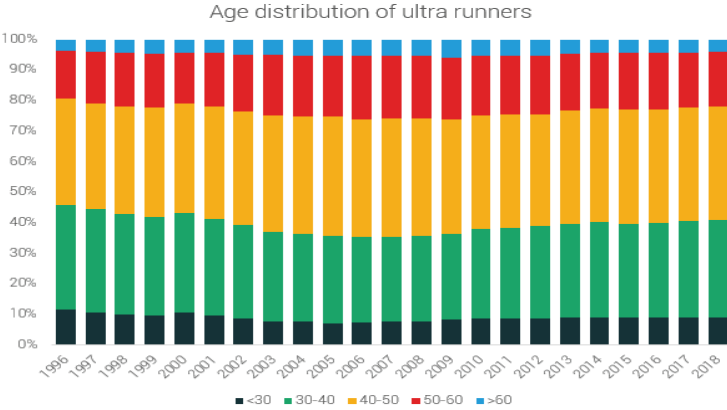
While extreme endurance events demand exceptional levels of fitness, it is

interesting to examine the age profile of participants in these events. The total number of amateur marathon runners under the age of 30 is only about 25%. Those above the age of 40 constitute nearly 40% of amateur full marathon runners worldwide.



**Figure 4:** Age Distribution of Marathon Runners in Percentage.  
*Source: The State of running report 2019, runrepeat.com*

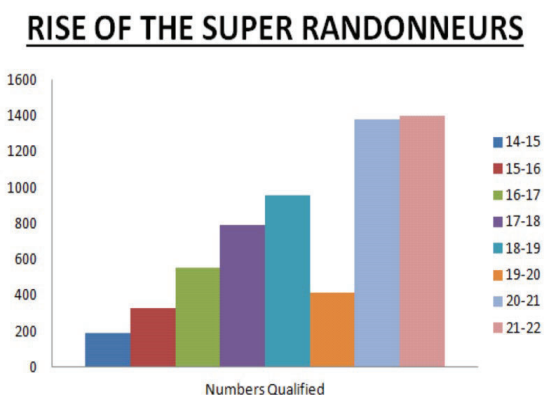
When it comes to ultramarathons, most participants are over 30 years old. Only about 10% of ultramarathon runners are under 30, while nearly 55% are over 40. On average, ultramarathoners are 42.5 years old, which is three years older than those who run regular marathons. The percentage of women taking part in ultramarathons has gone up from 14% in 1996 to 23% in 2020. These trends in India are similar to what's happening globally.



**Figure 5:** Age Distribution of Ultra Marathon Runners in Percentage.

Source: *The State of running report 2019, runrepeat.com*

Long-distance cycling is getting really popular in India, and we can see this from the growing number of Super Randonneurs. To become a Super Randonneur, a cyclist has to finish different distances of 200 km, 300 km, 400 km, and 600 km within specific time limits in a year, from November 1st to October 31st. In 2019–20, fewer people qualified because of COVID lockdowns, but in 2021, the numbers went up a lot.



**Figure 6:** Rising number of Super Randonneurs in India

## 4. Benefits of Endurance Sports

### i. Health Benefits

The health benefits of endurance events are evident and medically proven. In addition to improving participants' overall physical fitness, engaging in endurance events offers various advantages, including:

- Boosting metabolism.
- Lowering blood pressure and cholesterol levels.
- Reducing the risk of cardiovascular diseases.
- Decreasing the risk of developing several types of cancers.
- Lowering the chances of obesity, particularly among older individuals.
- Increasing insulin sensitivity.
- Improving bone and joint health.

- Promoting a youthful appearance and extending lifespan.

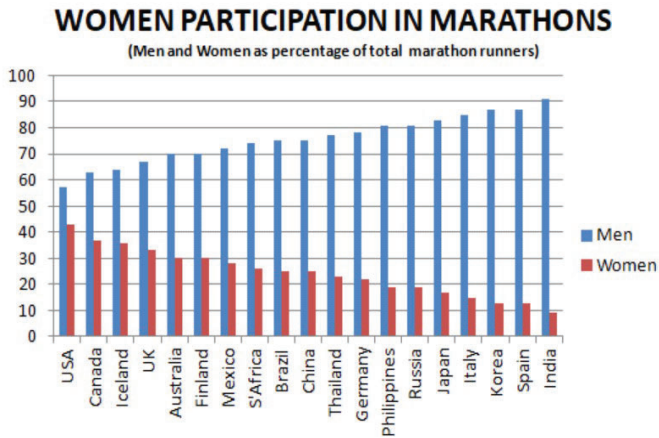
## **ii. Mental and Moral Benefits**

Endurance training isn't just about physical health; it also boosts mental and spiritual well-being. It makes you happier, reduces stress, and eases anxiety. Plus, it improves memory and brain function. Achieving tough physical goals builds confidence in your mind too. Participating in events and races encourages healthy competition, leading to better habits and a disciplined life. People start eating better, smoke less, drink less, and eat fewer processed foods. Some even dive into the science of improving performance. Long-distance running can be like meditation, and some see it as a way to explore their spirituality. In Japan, there are running monks who run intensely for seven years to find enlightenment. For many runners and cyclists, endurance activities become a kind of pilgrimage that helps them deal with life's challenges.

## **iii. Societal Benefits**

The typical path for a runner often begins with participation in five- or ten-kilometer events and then progresses to longer distances. The energy, enthusiasm, and spirit displayed during these events serve as significant motivators. As individuals start taking endurance events seriously, their families often become involved in the pursuit of fitness. Other family members, including elderly ones, join the fitness journey.

In addition to improved fitness, endurance events enhance confidence and self-esteem. The participation of women in endurance events is closely linked to women's empowerment. Countries with higher female participation in running events tend to be more progressive and sensitive to women's issues. While approximately 32% of marathon runners worldwide are women, India lags behind in this regard, with only 9% female participation in marathons.



**Figure 7:** Participation of Women in Marathons.

*Source: Marathon Statistics 2019 Worldwide, runrepeat.com*

Marathon runners connect with others, no matter their background. Ultra marathons in less touristy places help local tourism and promote national unity. Serious runners aim for international events, broadening their experiences. Businesses use marathons for team building and sometimes donate to social causes. Running also encourages eco-friendly practices, like using bicycles and reducing waste. But there are challenges too. Some people waste water and energy drinks during races. Educating participants is crucial to prevent this. Many runners help clean up after races and join efforts to keep beaches and walkways clean.

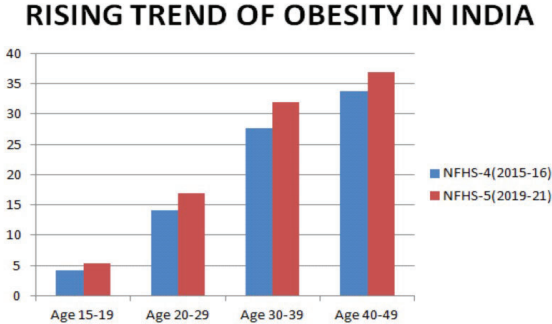
## 5. India, Endurance Sports and SDG Goals

SDG Goal number 3 focuses on promoting good health and well-being, aiming to reduce mortality rates, combat various diseases, and promote mental health and physical well-being. It also strives to strengthen the prevention and treatment of substance abuse, including narcotic drug abuse and harmful alcohol use. Other targets under SDG 3 include a significant reduction in deaths and illnesses from hazardous chemicals, air, water, and soil pollution, as well as the implementation of the World Health Organization Framework Convention on Tobacco Control in all countries.

While achieving many of these targets requires regulatory measures, an increase in fitness consciousness can also contribute significantly. Higher participation in endurance sports naturally aligns with these SDG targets.

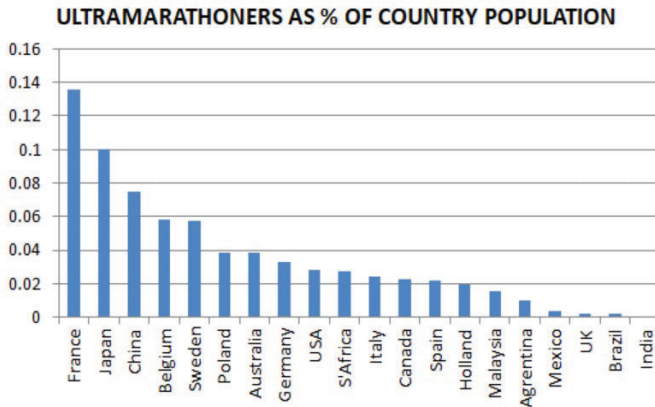


The latest National Family Health Survey (NFHS-5) has highlighted obesity as a major health concern for the Indian population. The trends are worrisome, with an increase in obesity across all segments of the population while simultaneously dealing with a large number of people suffering from malnutrition.



**Figure 8:** Rising Trend of Obesity in India.  
*Source: National Family Health Survey- 5 (2019-21)*

It is essential that we address obesity as a societal issue and develop remedial measures. The graph indicates that obesity is most prevalent in the age category of 30 to 50, which interestingly aligns with the 'golden age' for amateur endurance athletes, as evidenced by participation levels in various events worldwide. A larger number of people in this age group participating in endurance events can significantly reduce obesity. The number of ultra-marathoners per 100 people in the country serves as a valuable indicator to assess general fitness. The chart below illustrates the number of ultra runners in various countries expressed as a percentage of the population.



**Figure 9:** Ultramarathon Runners as % of Total Population.  
*Source: The State of Ultra Running 2020, runpepeat.com*

France leads the pack with 0.1361% of the population undertaking ultrarunning. While there are no official figures available regarding ultramarathoners in India, it is expected to be about 0.0002%, which is approximately one-tenth of the percentage figure of Brazil, the lowest reported in the State of Ultrarunning report. This also translates to roughly 1/600th of the percentage figure of France, 1/500th of Japan, and 1/400th of China.

Naturally, the need of the hour is to attract more people in the vulnerable age group to endurance training. Raising awareness about the positive impact of endurance sports on general physical fitness will be the first step in this direction. General fitness can be defined as the ability to perform daily activities with optimal performance, endurance, and strength while managing disease, fatigue, and stress. This naturally requires regular physical exercise and reduced sedentary behaviour, which can also boost mental health. By enhancing awareness among the population about endurance sports, we can also indirectly contribute to SDG goals 12 and 13 (Responsible consumption and climate change).

**i. The Way Forward**

India has made significant progress in amateur endurance sports over the last two decades. There has been a dramatic increase in participation across all segments of the population. The increase in the average finish time in marathons actually indicates a greater number of people participating in long-distance runs. Whereas marathons were once the domain of a few

trained athletes, more and more common people are stepping up to the challenge. Through this process of 'democratisation,' there has been heightened fitness consciousness and a contribution to social well-being. Consequently, endurance events have transformed from an elite endeavor of individual accomplishment to a means of promoting general health and a positive social and psychological orientation.

India still has a long way to catch up with developed countries when it comes to the number of people participating in endurance sports, especially compared to its total population. There's also a big chance for more women to get involved in these sports. The good thing is that most of these sports don't require a lot of money, so many people can join in. More people taking part also means more opportunities for Indian companies that make sports products like shoes, clothes, gear, bikes, and sports watches. This is something that both big and small Indian businesses can explore.

## **6. Conclusion**

The increasing number of Indians participating in marathon races, cycling events, triathlons, and other endurance sports is a positive change. The belief that endurance sports are the domain of professionals is a myth that is now being shattered. This has numerous positive impacts. In addition to individual health, participation in endurance sports can contribute to family and societal health. It can also help reduce consumption of alcohol, tobacco, and drugs, as envisioned in SDG 3.5. The indirect benefits of endurance sports include positive changes in consumption patterns, strengthening cross-cultural bonds, and promoting sustainable tourism. There is a definite need to encourage greater participation and government initiatives to popularise endurance events. Boosting endurance sports can reap significant benefits for society at large.

## **References**

1. Agarwal, Piyush. (2022). Obesity getting bigger in India: One in every four has a weight problem. Retrieved from <https://www.indiatoday.in/diu/story/obesity-india-one-in-every-four-has-weight-problem-1953621-2022-05-24>.
2. Anderson, Jens Jacob. (2021). Marathon Statistics 2019 Worldwide. Runrepeat.com. Retrieved from <https://runrepeat.com/research-marathon-performance-across-nations>.
3. Aravind. (2020). Tata Mumbai Marathon 2020 (TMM) in Numbers.

- Geeks on the Feet. Retrieved from <https://geeksonfeet.com/blog/tmm20innumbers/>.
4. Eapen, Joseph. (2021). The Indian running boom – How distance running became big business for sponsors. Yougovsport. retrieved from <https://sport.yougov.com/the-indian-running-boom-how-distance-running-became-big-business-for-sponsors/>.
  5. Karnazes, Dean. (2009). *50/50: Secrets I Learned Running 50 Marathons in 50 Days – and How You Too Can Achieve Super Endurance*. Kindle edition.
  6. Macdougall, Christopher. (2010). *Born to Run: The Hidden Tribe, The Ultra-Runners, And the Greatest Race the World has Never Seen*. Profile Books.
  7. Pande, Bhanu. (2018). Rise of the Marathon Runner. Tribune India. Retrieved from <https://www.tribuneindia.com/news/archive/features/rise-of-the-marathon-runner-572358>.
  8. Rizzo, Nicholas. (2021). 120+ Running Statistics 2021/2022. Runrepeat.com. retrieved from <https://runrepeat.com/running-statistics>.
  9. Ronto, Paul. (2021). The State of Ultra Running 2020. Runrepeat.com. retrieved from <https://runrepeat.com/state-of-ultra-running>.
  10. Ronto, Paul. (2021). Which Runners are the Most Obsessed? Runrepeat.com. retrieved from <https://runrepeat.com/most-obsessed-runners-stats-page>.