

# Keynote Address

on

## Human Dimension of transition to Net Zero Pathways

Supporting Wellbeing in Sports!



**Dr. Guneet Inder Jit Kaur**

Coordinator & Assistant Professor  
Department of Sports Psychology  
Department of Sports Biomechanics  
School of Sports Sciences  
Central University of Rajasthan, INDIA

[guneet@curaj.ac.in](mailto:guneet@curaj.ac.in)

# Sports?!

1

A key facilitator  
of sustainable  
health globally



**SDGs**  
Health  
Education  
Social Inclusion

2

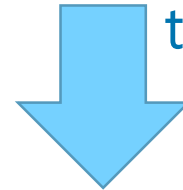
Promoter of  
tolerance and  
binder of  
communities



Environmental  
Consciousness

3

NEP  
NYP  
Fit India



4

Sporting Events  
– One of the  
most popular  
types of tourism



5

Life concerns

## Hosts

ICC Cricket World Cup 2023  
Chess Olympiad  
U-17 Football Women World Cup  
Men's Hockey World Cup  
World Boxing Championship  
Shooting World Cup

# THE CARBON FOOTPRINT

FROM  
PERFORMERS  
To  
SPECTATORS



# Carbon Footprint Analysis

## **Scope 1**

Direct Emissions: Travelling to Sport Facility, Competition or Destination

## **Scope 2**

Indirect Emissions: Heating a swimming pool, Watering a soccer field/Tennis court

## **Scope 3**

Indirect Emissions resulting from life cycle of product: Production of triathlon bike, a tennis racket, surf board

### Heterogeneity in Sports

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Individual Sports

Team/Racket Sports

Nature Sports

### Travel of Sportspersons

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Travelling to sport facility every week

Travelling to competitions and training camps

Sport vacations

### Sports Tourism- Spectators

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Spectators travelling to games and travelling back



# Heterogeneity of Sports

Individual Sports  
Team/Racket Sports  
Nature Sports

Nature sports (diving, surfing etc.)  
almost 50% higher than all individual  
sports

Field hockey, football and basketball  
had the highest carbon footprint  
(Wicker, 2022)



# Sports Travel

## The Sport-Related travel

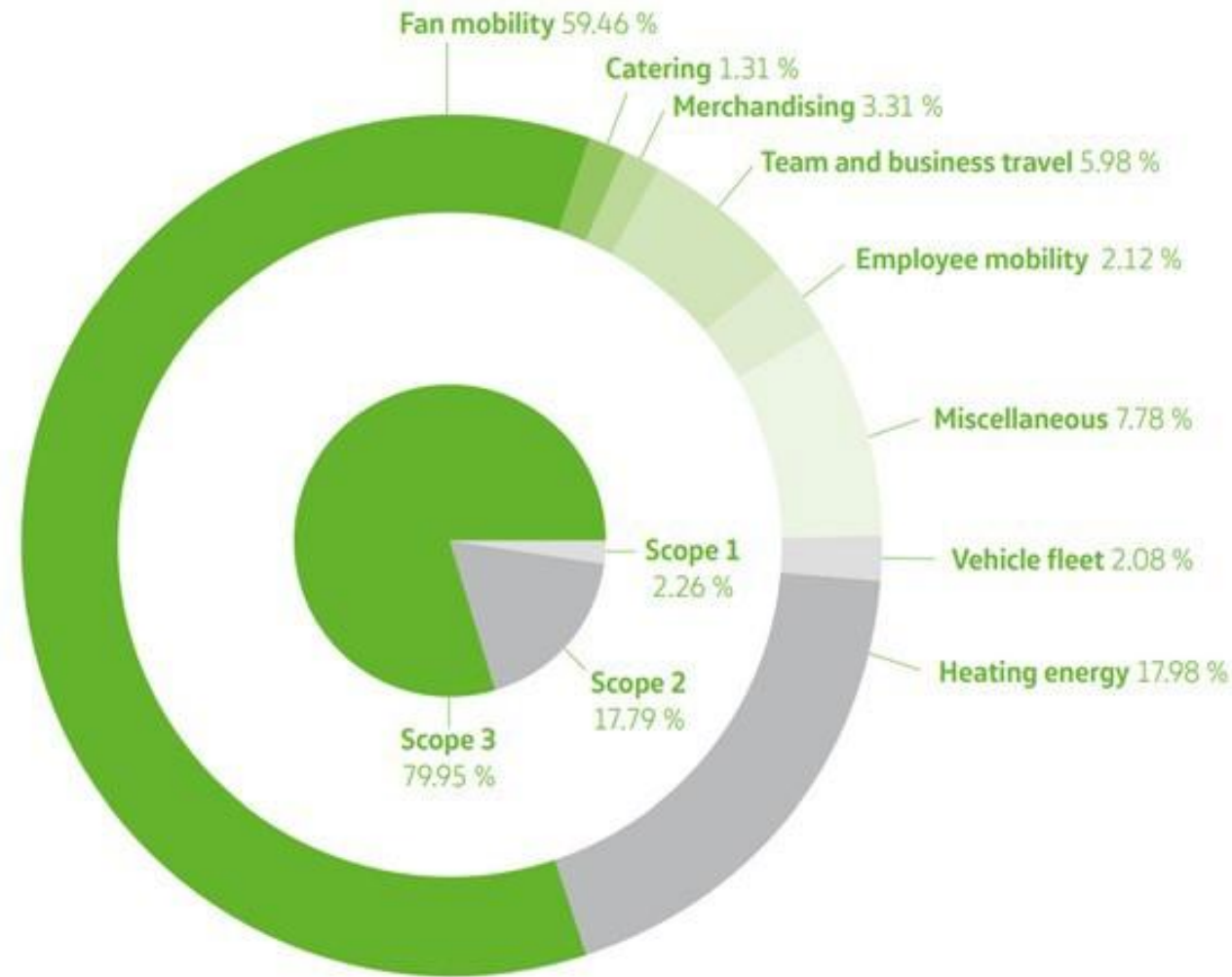
- produces carbon dioxide and other greenhouse gas emissions, which have negative effects on the environment
- by far the **LARGEST** forcing factor in climate change  
(Wicker, 2022)



# Sports Tourism

## Tourism's Environmental Paradox

Healthy Sports  
Unhealthy Travel





### Educational Level

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Environmental Knowledge

Familiarity with Environmental problems

### Gender

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Within Sport, Women fans were more likely to:

- ❖ belong to high pro-environmental cluster
- ❖ scored higher on environmental expectations, environmental values and future behaviour

(Casper et al., 2017)

### Income

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Within Active Sport Tourism, individuals earning higher income have a higher carbon footprint (Wicker, 2018)

# Factors

## Environmental Consciousness (Preisendorfer, 1999)

### Cognitive

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Understand how CO<sup>2</sup> emissions negatively affect climate change and the environment

### Conative

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Individual is willing to act and change something

### Emotional

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How individuals react emotionally to environmental problems

# Summary

With increasing level of performance, travel distance to league games and (inter) national competitions tends to increase, resulting in a higher carbon footprint.

Sports clubs organize training camps and encourage participation in tournaments/ competitions outside of the organized league system which add to the travel frequencies and annual carbon footprint.

**Environmental Value-Action Gap:** Sport-related travel in team/racket sports and nature sports shows discrepancy between intention and action due to constraints with respect to time, money, convenience etc.





The background of the slide is a photograph of a forest. The trees are large and have thick, gnarled trunks. The foliage is dense and green, with some sunlight filtering through the canopy. A path or stream is visible in the distance, leading the eye into the forest.

# Sports Paradox

**Positive effects of active sports participation on health and well-being diminished by negative environmental outcomes caused by pollution stemming from sport-related commuting and travel**



# Way Out-Way Ahead

1

Reduction in  
carbon  
emissions:  
Shared  
responsibility of  
all stakeholders  
Policy makers  
Academicians  
MOUs

2

Policy Level  
Economic  
incentives  
Holistic discussion  
of sport  
participation  
outcomes

3

Global/National  
Level  
Scheduling league  
games as well as  
official tournaments  
considering travel  
distances and  
transportation  
means  
Provision of  
environmental  
friendly alternatives

4

Participant Level  
Choice of travel  
Transportation  
Means

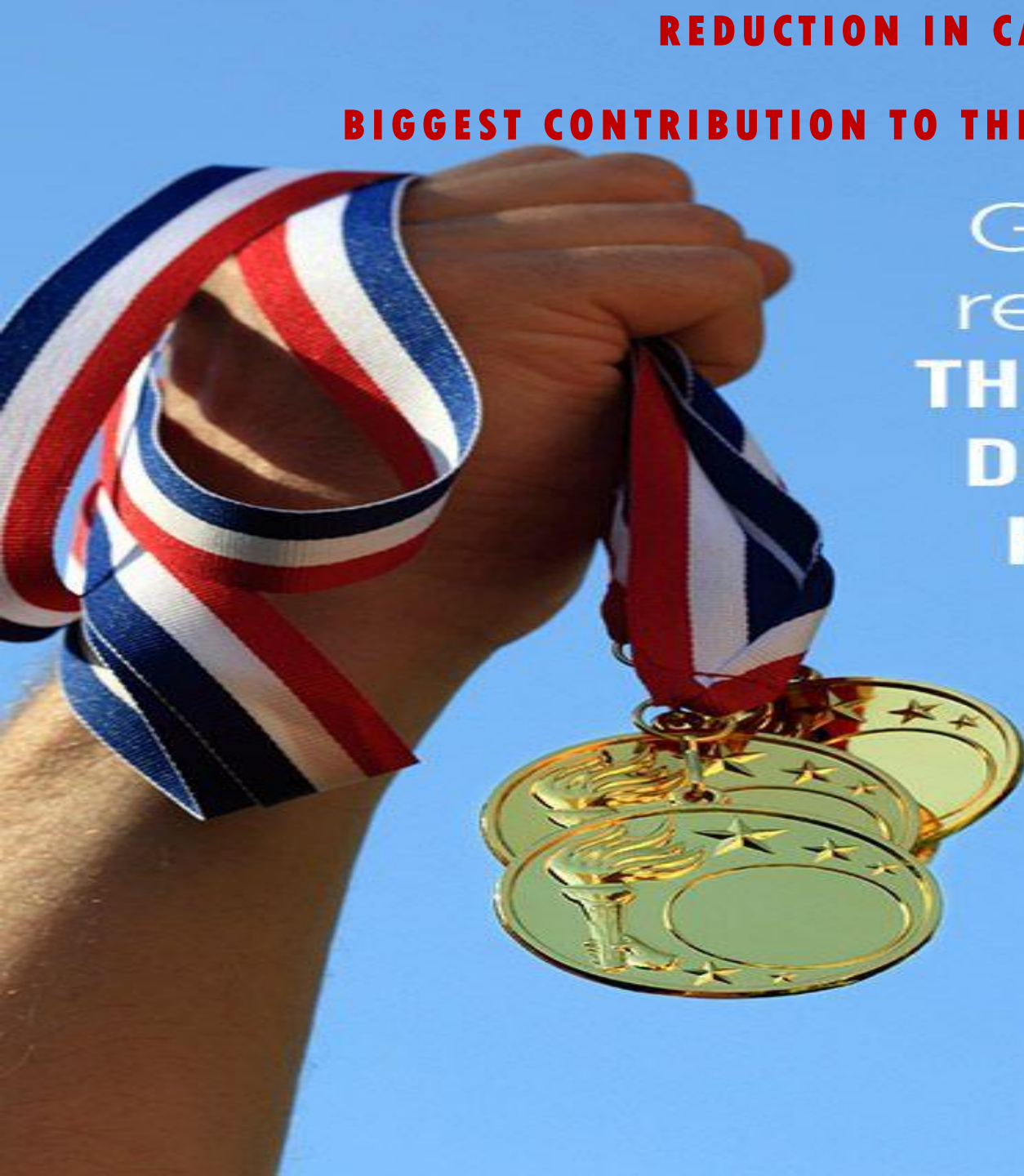
5

Academia  
Industry MOUs  
Research in sport  
and  
environmental  
sustainability



**REDUCTION IN CARBON EMISSIONS**

**BIGGEST CONTRIBUTION TO THE WELL-BEING OF OUR ATHLETES!**



Gold medals aren't  
really made of gold.  
**THEY'RE MADE OF SWEAT,  
DETERMINATION, AND A  
HARD-TO-FIND ALLOY  
CALLED GUTS.**

*— Dan Gable*

**DIRECTCAPITAL**  
a **CIT** company



THANK YOU 😊



# Looking Forward to your Questions and Feedback

[guneet@curaj.ac.in](mailto:guneet@curaj.ac.in)