

# **WOMEN IN SCIENCE & TECHNOLOGY, IETE**

**WHAT WILL IT TAKE FOR MORE WOMEN TO  
ASSUME LEADERSHIP POSITIONS**

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# SOME STATISTICS

- India ranks 132 out of 186 countries on the Gender Equality Index 2012.
- 51% of adolescent girls drop out of school before class 10.
- Seats in national parliament 10.9%
- Participation in labour force <30%
  - > India loses a quarter of its GDP on account of low female participation in labour force
  - > Indian woman devote 90% of their earnings to family (45-50% for males)

# SOME STATISTICS

- **Female representation in science enrolments, is around 65%. (80.4% in the biological, medical and life sciences)**
- Female representation in engineering and physics enrolments is 32%.
- **However, representation in the overall science and engineering workforce is only 12.7%.**

# SOME FINDINGS

- ◎ **Low representation in decision making in Universities**

- ◎ **One study found that,**

***“Though women earned 37 percent of all science PhDs awarded by Indian institutions, **they constituted only 15 percent of the total R&D manpower in science and technology,**”***

***“Female scientists tend to work in small teams, publish in low-impact, domestic journals and contribute to fewer international collaborative papers than men.”***

# SOME TRUE STORIES

- ◎ Colleagues who are engineering graduates:
  - > Lack of mentors
  - > Lack of facilities for women during field work
  - > (*Perceived*) Lack of support at home
  - >> **Fall back into non-technical, administrative, but not leadership positions**

# A SUMMATION

- ◉ Fewer women in Science & Technology, especially in leadership positions, leads to fewer women in that profession as a vicious cycle.
- ◉ Clearly much more support is needed to encourage women to retain focus and increase professional participation in S& T

# WOMEN AT WORK-LEADERSHIP

## What Holds Us Back

- ◉ Outside Influences
- ◉ Internal Conditioning

# STEREOTYPES

- ◎ **WOMEN ARE EXPECTED TO BE NICE**
- ◎ **LEADERS MUST BE COMPETENT & LIKEABLE**
- ◎ **COMPETENT WOMEN NOT (*PERCEIVED* AS) NICE**
- ◎ **COMPETENT WOMEN CANNOT BE GOOD LEADERS**



# GENDER BIAS-LABELS



# Women CFOs say....

- ⦿ Lack of flexi-work
- ⦿ Support system at home
- ⦿ ***“To be recognized and acknowledged as leaders, women need to shed their fears and be bold, decisive and outspoken. However they should be careful that they do not project themselves as arrogant or obstinate”***

-Ms P. Alli Rani, Dir(F), Container Corportaion of India

Ms M-

# THE CAREER MARATHON



# THE CAREER MARATHON



# THE CAREER MARATHON



**WHAT  
ABOUT  
YOUR  
FAMILY?**

**Is it  
worth  
it**

**DO  
YOUU  
REALLY  
WANT  
THIS?**

**BABY,  
BOARDS,  
AILING IN-  
LAWS & YOU  
DO THIS?**

# THE CAREER MARATHON



**I DID  
IT!**

**GREAT  
WORK!**

**KEEP  
GOING!**

# THE CAREER MARATHON

**EVERY  
OPPORTUNITY  
FOREGONE  
ADDS TO FEAR**

-Ms SHAH, CEO, EDELGIVE

**ITS  
TOO  
HARD**



# INTERNALISED NEGATIVE MESSAGES

## ◉ Blend in, **Don't ...**

### Male Attributes:

- > Draw attention to self
- > Don't boast
- > Be aggressive & outspoken
- > Seek power

### Female Compulsions

- > Ask for flexitime
- > Expect spouse to shoulder half the burden



# INTERNALISED HANDICAPS

- ⊙ Fears

- > Not being liked
- > Not succeeding
- > Not having the necessary skills
- > Fear of criticism

- ⊙ Self Doubt-Lack of Confidence

- > Afraid to be ambitious
- > Afraid to aspire for Leadership positions
- > Afraid to take career related risks

>>Failure to translate academic gains into professional success

NO WONDER THEN....



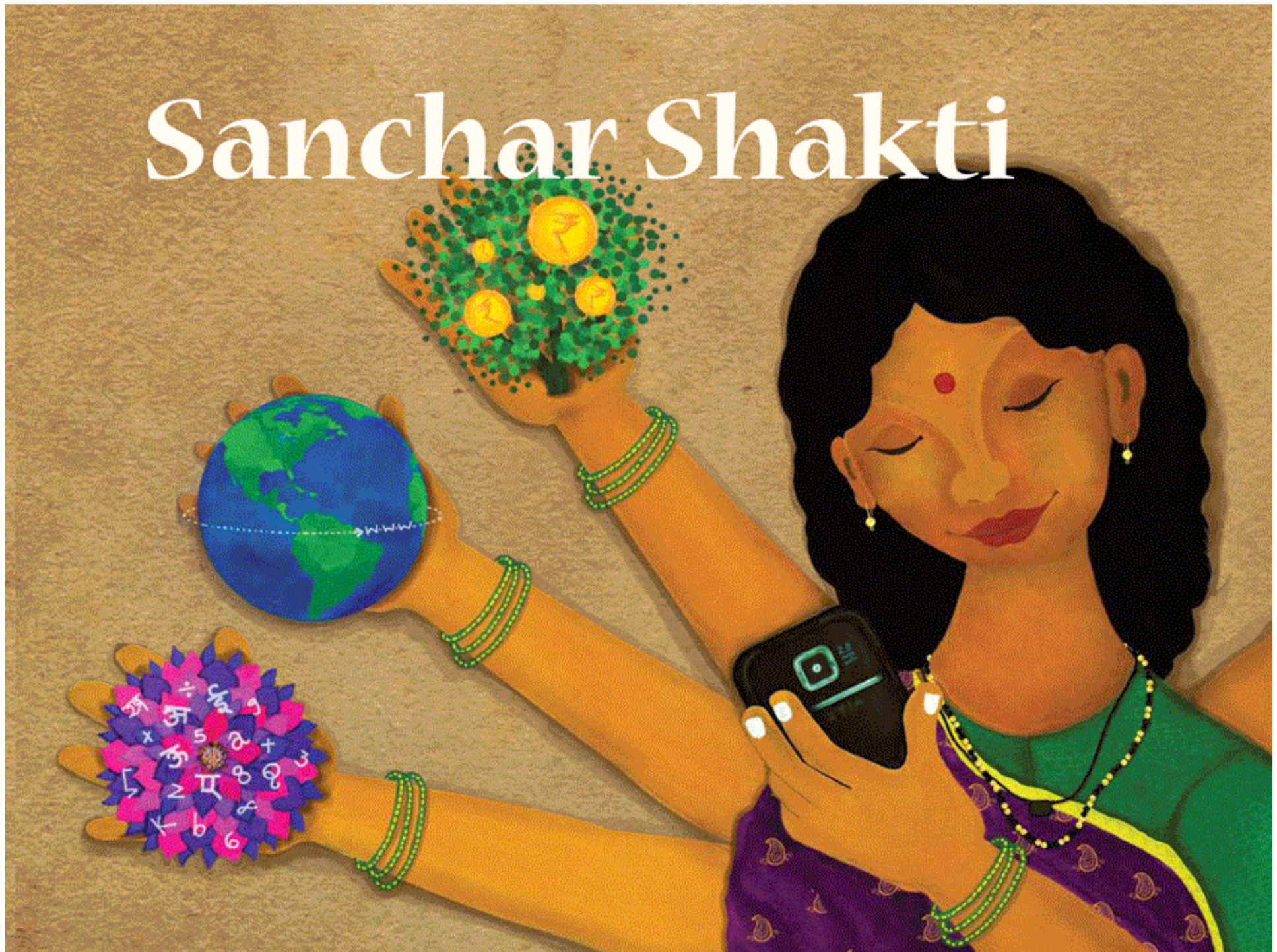
THREE FOURTHS OF A PENNY FOR YOUR THOUGHTS

# OTHER BARRIERS: ADAPTING THE FIELD FOR FEMALE PARTICIPATION





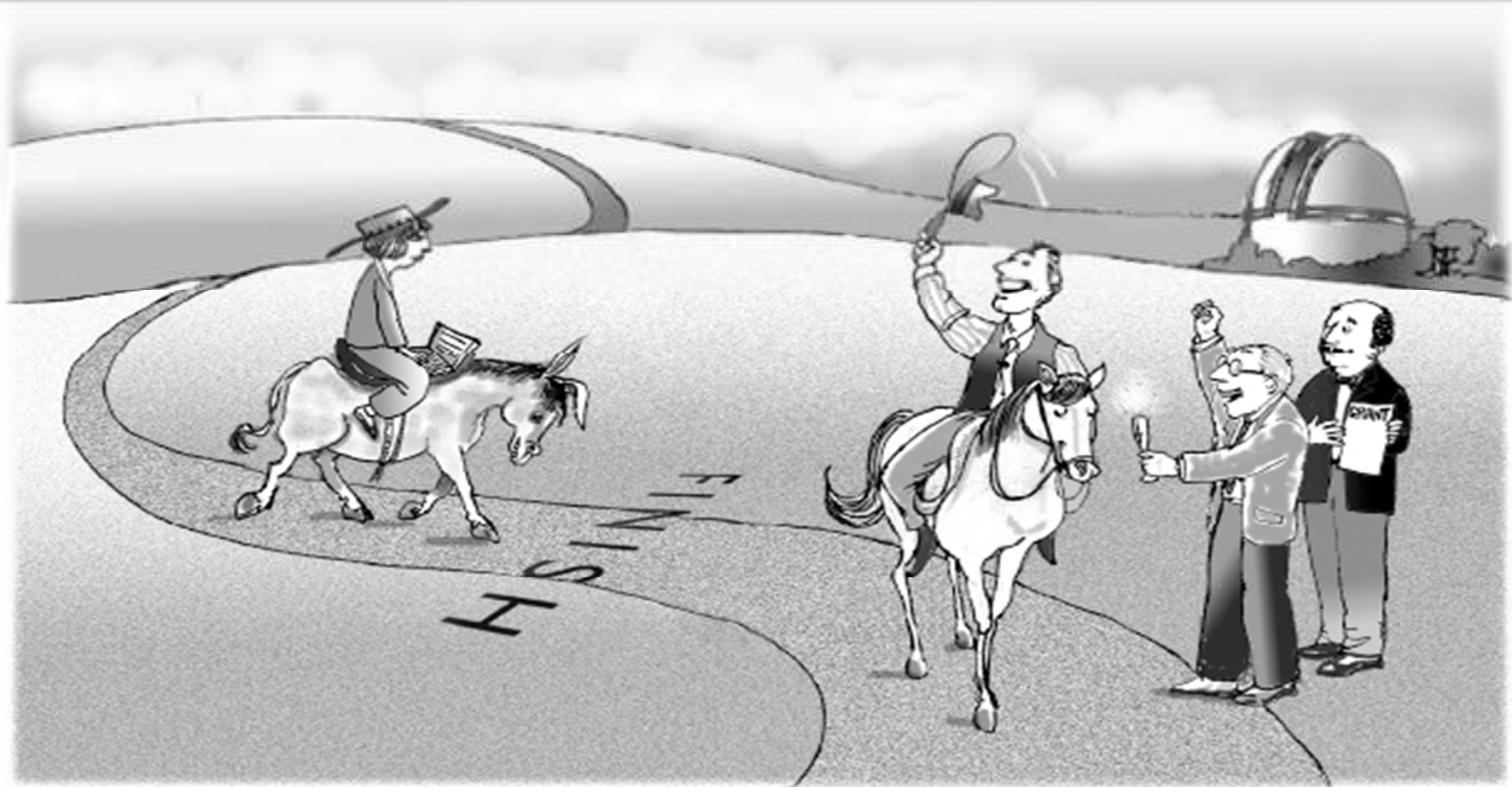
# Sanchar Shakti





# WORK TWICE AS HARD....

- TO BE RATED HALF AS GOOD



*"You know, she tries, but he's just so much FASTER than she is!"*

# ALL THIS CAN CHANGE

## ◎ SOCIETAL-ATTITUDES

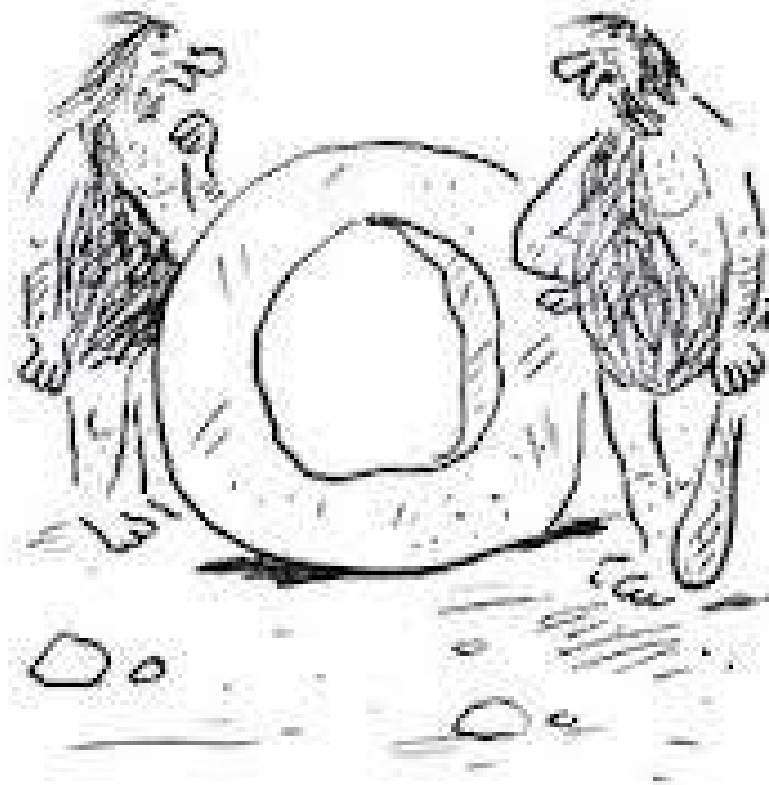
- > Parents
- > Spouses
- > Teachers
- > Bosses
- > Mentors

## TO CONCLUDE

- ◉ With self confidence in place women can achieve great success

# THE TRUTH...

NECESSITY IS THE **MOTHER** OF INVENTION

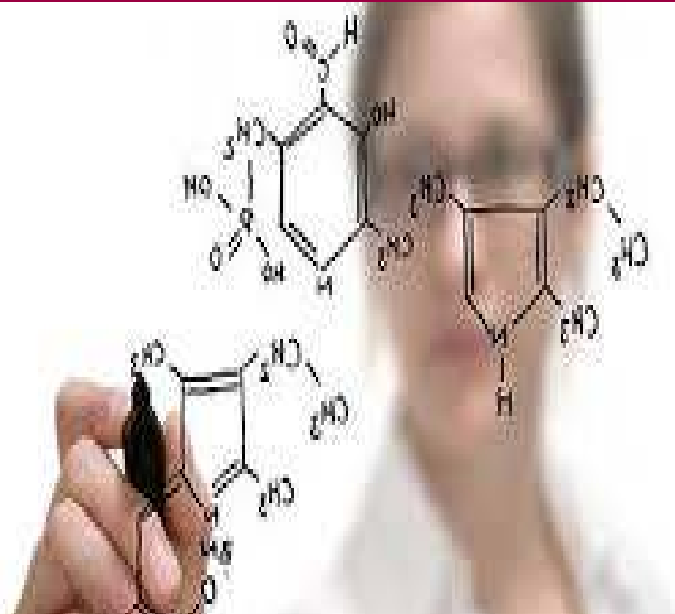


*'Actually my wife invented  
it, whatever it is...'*





**THANKS!**  
**(TO WOMEN)**



# References

- ◉ Sheryl Sandberg, “Lean in, Women, Work & the Will to Lead”
- ◉ “Why Invest in Adolescent Girls,” Hindustan Times, March 03, 2014
- ◉ Human Development Report 2012
- ◉ “Women Who Put Money to work,” The Economic Times, March 7, 2014