Why Are They All So Happy?

Rachel Watson



2019 NEWEA Annual Conference Boston, MA – January 28, 2019



- Background on Bhutan
- Gross National Happiness
- Personal Travel
- Water Infrastructure and Resource Conservation



S

26 -

• Bhutan population = 0.8 million (8 people / km²)

Maryland population = 6 million (500 people / km²)

2% annual population growth

• "End of Tibet"

Consolidated kingdom 1907

Democracy 1953







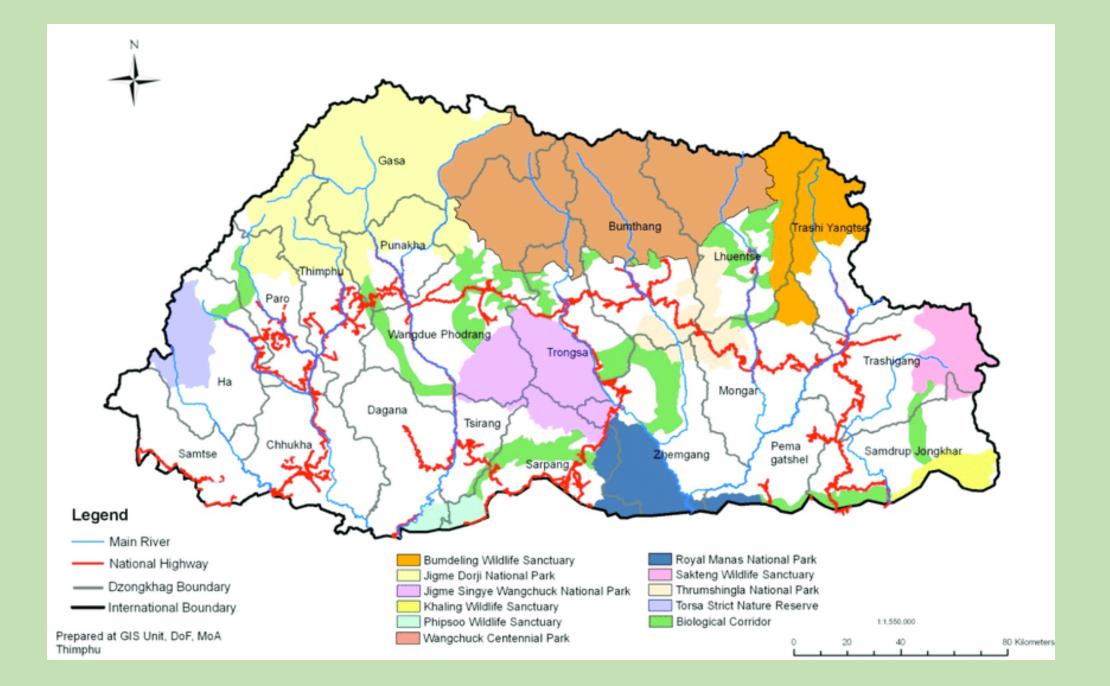




"The Government shall ensure that, in order to conserve the country's natural resources and to prevent degradation of the ecosystem, a minimum of sixty percent of Bhutan's total land shall be maintained under forest cover for all time."

Article 5 Section 3: Constitution of the Kingdom of Bhutan

for all time.





Gross National Happiness

- All government polices & plans are screened for GNH (mandatory mainstreaming of environmental issues into plans, policies & programs)
- All development projects/activities should be aligned with the GNH approved/endorsed plans
- Quarterly review is conducted to measure progress & status
- GNH survey is conducted every 5 years and, based on the results, measures are taken to improve the GNH Index.
- GNH Index effectively classifies the population depending on the degree of happiness
 - Deeply happy (>77%)
 - Extensively happy (66% 76%)
 - Narrowly happy (50% 65%)
 - Unhappy (0 %- 49%)























- 1. Finland (7.632)
- 2. Norway (7.594)
- 3. Denmark (7.555)
- 4. Iceland (7.495)
- 5. Switzerland (7.487)
- 6. Netherlands (7.441)
- 7. Canada (7.328)
- 8. New Zealand (7.324)
- 9. Sweden (7.314)
- 10. Australia (7.272)
- 11. Israel (7.190)
- 12. Austria (7.139)
- 13. Costa Rica (7.072)
- 14. Ireland (6.977)
- 15. Germany (6.965)
- 16. Belgium (6.927)
- 17. Luxembourg (6.910)
- 18. United States (6.886)
- 19. United Kingdom (6.814)
- 20. United Arab Emirates (6.774)



Summary

- Holistic approach to development including happiness and wellbeing
- Focus on planning for future development with infrastructure and environmental resiliency
- Emphasis on incentives rather than penalties for environmental conservation

Thank you!

THE R

PROJECT DANTAK
PROJECT DANTAK
WHEN YOU CONSERVE WATER
YOU CONSERVE LIFE

102 RCC 19 TF



Questions?



2019 NEWEA Annual Conference Boston, MA – January 28, 2019 For more information, contact: Rachel Watson, E.I.T. Stantec, Civil Engineering Designer 860-948-1628, ext. 7112 <u>Rachel.Watson@Stantec.com</u>

Stantec