

## SANDEE

Advance Training Workshop in Econometrics for Environmental Economists  
Club Hotel Dolphin, Waikkal, Sri Lanka  
December 9-12, 2005

	Day 1 (9 <sup>th</sup> Dec. 05)	Day 2 (10 <sup>th</sup> Dec. 05)	Day 3 (11 <sup>th</sup> Dec. 05)	Day 4 (12 <sup>th</sup> Dec. 05)
Time	S-1	S-5	S-9	S-13
9:00-10:30	<p>Review of Regression Analysis (Estimation, Violation of assumptions) <i>Note: prior knowledge of econometrics is required**</i></p> <p><b>Gujarati:</b> Chapters X, XI &amp; XII</p> <p>Linear multivariate regression analyses with dummy independent variables</p> <p><b>Gujarati:</b> Chapter IX <b>Green:</b> Chapter VIII (8.2)</p> <p style="text-align: center;"><b>TKK</b></p>	<p>Specification Analysis</p> <p><b>Gujarati:</b> Chapter XIII <b>Green:</b> Chapter VIII (8.4)</p> <p style="text-align: center;"><b>TKK</b></p>	<p>Dichotomous Dependent Variable Models (Probit, Logit) and their extensions – estimation and testing of hypothesis</p> <p><b>Gujarati:</b> Chapter XV (15.1 – 15.10, 15.13) <b>Green:</b> Chapter XIX (19.1 – 19.4, 19.7 – 19.8)</p> <p style="text-align: center;"><b>TKK</b></p>	<p>Simultaneous Equation Systems: Identification</p> <p><b>Gujarati:</b> Chapters 18 &amp; 19 <b>Green:</b> Chapters XVI (16.1 – 16.3)</p> <p style="text-align: center;"><b>TKK</b></p>
10:30	Tea/Coffee Break			
	S-2	S-6	S-10	S-14
11:00-12:30	<p>Exploratory Data Analysis</p> <p><b>Gujarati:</b> Chapter VI (6.4 – 6.9) <b>Green:</b> Chapter VIII (8.3)</p> <p style="text-align: center;"><b>TKK</b></p>	<p>Maximum Likelihood Estimation, Likelihood Ratio, Wald and Lagrange Multiplier Tests</p> <p><b>Green:</b> Chapters IX (9.6.3), X</p> <p style="text-align: center;"><b>TKK</b></p>	<p>Tobit Model; Count Data and Poisson Model; Estimation and Hypothesis Testing</p> <p><b>Gujarati:</b> Chapter XV (15.11, 15.12) <b>Green:</b> Chapter XIX (19.9)</p> <p style="text-align: center;"><b>TKK</b></p>	<p>Simultaneous Equation Systems: Estimation and Hypothesis Testing</p> <p><b>Gujarati:</b> Chapter XX <b>Green:</b> Chapter XVI (16.4 – 16.7)</p> <p style="text-align: center;"><b>TKK</b></p>
12:30	Lunch			

	S-3	S-7	S-11	S-15
2:00-4:00	Introduction to STATA with practical demonstration  SM	Discussion of Exercise 1  Exercise 2  SM	Discussion of Exercise 2  Exercise 3  SM	Exercise 3 contd.  Discussion on Exercise 2  SM
4:00	Tea/Coffee Break			
	S-4	S-8	S-12	S-16
4:30-6:30	Practice Session: Exercise 1  SM	Exercise 2 contd.  SM	Exercise 3 contd.  SM	Workshop evaluation & closure

**\*\*Chapters 1-12 of Damodar Gujarati's text book "Basic Econometrics" is a required reading.**

**Late afternoon time will also be the time for senior researchers to discuss their own research with Prof. Kumar**

#### References:

- a. **Required:** Gujarati, Damodar, *Basic Econometrics, 4th Edition, Tata McGraw Hill.*
- b. **Recommended reference book:** Greene, William, *Econometric Analysis (5<sup>th</sup> Edition)*

#### Resource Persons:

**Prof. T. Krishna Kumar:** Course Director

**Dr. S Madheswaran:** Resource Person to teach specific topics plus will be a resource person to handle the software. **STATA will be used for the practice sessions.**

Exercise 1 – Linear multivariate regression model with intercept dummies and Dummy-slope interaction terms.

Exercise 2 – Logit / Probit Model, Poisson Model

Exercise 3 – Tobit Model and 2SLS