

# PROGRAM ON INVESTMENT APPRAISAL AND RISK ANALYSIS

July 8 – August 9, 2002



## WEEK 1, DAY 1

---

### MONDAY, JULY 8

---

9:00 – 10:30	<b>Course Commencement</b>	PIARA Faculty Class 3A
10:30 – 10:45	<b>Break</b>	
10:45 – 12:00	<b>Role and Components of Investment Evaluation</b> Introduction to the Integrated Financial-Economic-Distributive Appraisal of Projects	PIARA Faculty Class 3A
<b>Readings/ References:</b>	<ul style="list-style-type: none"><li>– Chapter “One and Two” in Cost-Benefit Analysis of Investment Decision Manual, Glenn P. Jenkins and Arnold C. Harberger, Cambridge Resources International, 2000.</li><li>– Kuo, “A Conceptual Framework for Economic Evaluation of Industrial Projects,” Economic Essays, National Taiwan University, Taipei.</li></ul>	
12:00 – 13:30	<b>Lunch</b>	
13:30 – 15:00	<b>Analysis of Financial Profiles from Alternative Points of View</b>	Class 3A
<b>Readings/ References:</b>	<ul style="list-style-type: none"><li>– “Teaching Note #1: A summary of the Integrated Project Appraisal Methodology: Manila South Water Distribution Project Case,” Glenn P. Jenkins and Gangadhar P. Shukla, Cambridge Resources International, Cambridge MA, February 1996.</li><li>– Spreadsheet Tables for Manila South Water Distribution Project Case</li></ul>	
15:00 – 16:30	<b>Walking Tour of Queen’s</b>	
18:00 – 20:30	<b>Opening Reception</b>	Queen's Faculty Club

# PROGRAM ON INVESTMENT APPRAISAL AND RISK ANALYSIS

July 8 – August 9, 2002

## WEEK 1, DAY 2

---

**TUESDAY, JUNE 9**

---

**9:00 – 10:30 Financial Modelling**

PIARA Faculty  
Class 3A

***Readings/  
References***

- Chapters “1 and 3” in The Financial Analyst’s Deskbook, Henderson and Maness.

**10:30 – 10:45 Break**

**10:45 – 12:00 Analysis of Cash Flows**

PIARA Faculty  
Class 3A

***Readings/  
References***

- “Chapter Three: Appraisal of Investments: Construction of Financial Profiles for Projects,” in: Cost-Benefit Analysis of Investment Decisions, Glenn P. Jenkins and Arnold C. Harberger, Cambridge Resources International, Cambridge MA, 2000.

**12:00 – 13:30 Lunch**

**13:30 – 19:00 Distribution and Analysis of Case 1:  
Manila South Water Financial Analysis**

PIARA Faculty  
Class 3A

Case Study: Manila South Water Distribution Project  
Implication for Private / Public Provision

***Readings/  
References***

- Case One, “Potable Water Supply Expansion: Financial Analysis of the Manila South Water Distribution Project”.
- “Will Asian Privatization be Watered Down in Manila?”, The Economist, 2-1-1997.

# PROGRAM ON INVESTMENT APPRAISAL AND RISK ANALYSIS

July 8 – August 9, 2002

## WEEK 1, DAY 3

---

WEDNESDAY, JULY 10

**DUE: 9:00 AM**

**Case 1**

**09:00 – 10:30 Alternative Investment Criteria**

PIARA Faculty  
Class 3A

**Readings/  
References:**

- “Chapter Four: Discounting and Alternative Investment Criteria,” in Cost-Benefit Analysis of Investment Decisions, Glenn P. Jenkins & Arnold C. Harberger, Cambridge Resources International, Cambridge MA, 2000.

**10:30 – 10:45 Break**

**10:45 – 12:00 Alternative Investment Criteria (Continued)**

PIARA Faculty  
Class 3A

**12:00 – 13:30 Barbeque**

**13:30 – 15:00 Participant Presentation of Case 1**

Computer lab

**15:30 – 19:00 Introduction to Computers and Excel Application**

**Distribution and Analysis of Case 2: Arkati Power Company**

**Readings/  
References:**

- Teaching Note #2: Introduction to Excel Application
- Case Two: “Alternative Points of View: Arkati Power Company.”

# PROGRAM ON INVESTMENT APPRAISAL AND RISK ANALYSIS

July 8 – August 9, 2002

## WEEK 1, DAY 4

---

### THURSDAY, JULY 11

---

<b>09:00 – 10:30</b>	<b>Valuation of Existing Assets and Land</b>	PIARA Faculty
<b><i>Readings/ References:</i></b>	– “Chapter Three: Appraisal of Investments: Construction of Financial Profiles for Projects,” in: Cost-Benefit Analysis of Investment Decisions, Glenn P. Jenkins and Arnold C. Harberger, Cambridge Resources International, Cambridge MA, 2000.	
<b>10:30 – 10:45</b>	<b>Break</b>	
<b>10:30 – 12:00</b>	<b>Estimation and Use of Debt Service Capacity Ratios</b>	PIARA Faculty Class 3A
<b><i>Readings/ References:</i></b>	– “Chapter Five: Scale, Timing and Inter-Dependencies in Project Selection,” in Cost-Benefit Analysis of Investment Decisions, Glenn P. Jenkins & Arnold C. Harberger, Cambridge Resources International, Cambridge MA, 2000.	PIARA Faculty Class 3A
<b>12:00 – 13:00</b>	<b>Lunch</b>	
<b>13:30 – 19:00</b>	<b>Review and Analysis of Case 2</b>	PIARA Participant Class 3A

# PROGRAM ON INVESTMENT APPRAISAL AND RISK ANALYSIS

July 8 – August 9, 2002

## WEEK 1, DAY 5

---

**FRIDAY, JULY 12**

---

**9:00 – 10:30**

**Principles of Microeconomics I**

PIARA Faculty  
Class 3A

***Readings/  
References:***

- Dhakal, D.N S., Lecture Notes on "Foundations of Applied Microeconomics for Investment Appraisal," Cambridge Resources International, 2000.
- "Chapter Seven: "Objectives and Framework for Economic Investment Appraisal," in: Cost-Benefit Analysis of Investment Decisions, Glenn P. Jenkins & Arnold C. Harberger, Cambridge Resources International, 2000.

**10:30 – 10:45**

**Break**

**10:45 – 12:00**

**The Importance of Scale and Timing in Project Appraisal**

***Readings/  
References:***

- "Chapter Five: Scale, Timing and Inter-Dependencies in Project Selection," in Cost-Benefit Analysis of Investment Decisions, Glenn P. Jenkins & Arnold C. Harberger, Cambridge Resources International, Cambridge MA, 2000.

**12:00 – 13:30**

**Lunch**

**13:30 – 15:00**

**Analysis of Case 2**

Computer lab

**15:00 – 15:15**

**Break**

**15:15 – 19:30**

**Analysis of Case 2**

Computer Lab

***Formation of Major-Case Appraisal Team***  
(Group Selections)

## PROGRAM ON INVESTMENT APPRAISAL AND RISK ANALYSIS

July 8 – August 9, 2002

### WEEK 1, DAY 6

---

#### SATURDAY, JULY 13

---

<b>9:00 – 10:30</b>	<b>Foundations of Risk and Uncertainty</b>	PIARA Faculty
<b><i>Readings/ References:</i></b>	– Lecture Notes	
<b>10:30 – 10:45</b>	<b>Break</b>	
<b>10:45 – 12:00</b>	<b>Foundations of Risk and Uncertainty (Continued)</b>	PIARA Faculty
<b>12:00 – 13:30</b>	<b>Lunch</b>	
<b>PM</b>	<b>Thousand Islands Boat Cruise</b>	

### WEEK 1, DAY 7

---

#### SUNDAY, JULY 14

---

<b>AM</b>	<b>Free Time</b>	
<b>12:00 – 13:30</b>	<b>Lunch</b>	
<b>13:30 – 20:30</b>	<b>Completion of Case 2</b>	Computer lab

### END OF WEEK ONE

# PROGRAM ON INVESTMENT APPRAISAL AND RISK ANALYSIS

July 8 – August 9, 2002

## WEEK 2, DAY 1

---

**MONDAY, JULY 15**

---

**DUE: 9:00 AM**

### Case 2

**9:00 – 10:30**

**Integration of Movements in Prices, Inflation, and Exchange Rates**

PIARA Faculty

***Readings/  
References:***

- “Chapter Six: “ The Use of Consistent Prices in the Financial Appraisal,” in: Cost-Benefit Analysis of Investment Decisions, Glenn P. Jenkins & Arnold C. Harberger, Cambridge Resources International, 2000.
- Harberger, A.C., “Project Evaluation,” Chapter 2, 1976, pp. 42-48.

**10:30 – 10:45**

**Break**

**10:45 – 12:00**

**Integrated Financial Analysis of Investments**

PIARA Faculty

**12:00 – 13:30**

**Lunch**

**13:30 – 15:00**

**Participant Presentation of Case 2**

PIARA Participant

**15:00 – 15:15**

**Break**

**15:15 – 19:00**

**Distribution and Analysis of Case 3:  
Sensitivity and Risk Analysis of Manila Water Project**

Computer Lab

***Readings/  
References:***

- Case Three, “Potable Water Supply Expansion: Sensitivity and Risk Analysis of the Manila South Water Distribution Project”.

# PROGRAM ON INVESTMENT APPRAISAL AND RISK ANALYSIS

July 8 – August 9, 2002

## WEEK 2, DAY 2

---

### TUESDAY, JULY 16

---

<b>9:00 – 10:30</b>	<b>Risk Analysis and Management</b>	PIARA Faculty
<b><i>Readings/ References:</i></b>	<ul style="list-style-type: none"><li>– Brigham, “Risk Analysis and the Optimal Capital Budget” Canadian Financial Management, 3rd ed. Holt, Rinehart and Winston of Canada, Chapter 10.</li><li>– Savvakis Savvides, Risk Analysis in Investment Appraisal, Project Appraisal, Volume 9, Number 1, pages 3 – 18, March 1994.</li></ul>	
<b>10:30 – 10:45</b>	<b>Break</b>	
<b>10:45 – 12:00</b>	<b>Risk Analysis and Management (Continued)</b>	PIARA Faculty
<b>12:00 – 13:30</b>	<b>Lunch</b>	
<b>13:30 – 15:00</b>	<b>Introduction to Crystal Ball Software: A Risk Analysis Demonstration Case: “Reforestation Tree Nursery.”</b>	PIARA Faculty
<b><i>Readings/ References</i></b>	<ul style="list-style-type: none"><li>– Teaching Note #3: Sensitivity Analysis, “Using Microsoft Excel’s Table Function”.</li><li>– Teaching Note #4: Risk Demonstration: “Crystal Ball Risk Analysis Demonstration: Marina Case”</li><li>– User Manual, “Crystal Ball: Version 4,”1996.</li></ul>	
<b>15:00 – 15:15</b>	<b>Break</b>	
<b>15:15 – 19:00</b>	<b>Analysis of Case 3</b>	Computer Lab
<b>19:00 – 21:00</b>	<b>MC Group Selections and Major Case Meetings</b>	TBA



## PROGRAM ON INVESTMENT APPRAISAL AND RISK ANALYSIS

July 8 – August 9, 2002

### WEEK 2, DAY 3

---

#### WEDNESDAY, JULY 17

---

**9:00 – 10:30**     **Principles of Contracting, Risk Sharing and Risk Reduction**     PIARA Faculty

**Readings/  
References:**     – Graham Glenday, “Risk Sharing Contracts in Project Appraisal,” Canadian Journal of Program Evaluation, 1996.

**10:30 – 10:45**     **Break**

**10:45 – 12:00**     **Principles of Contracting, Risk Sharing and Risk Reduction (Continued)**     PIARA Faculty

**12:00 – 13:30**     **Lunch**

**13:30 – 19:00**     **Completion of Case 3**     Computer Lab

# PROGRAM ON INVESTMENT APPRAISAL AND RISK ANALYSIS

July 8 – August 9, 2002

## WEEK 2, DAY 4

---

**THURSDAY, JULY 18**

---

**DUE: 9:00 AM**

**Case 3**

**9:00 – 10:30 Principles of Microeconomics II**

**Readings/  
References:**

- Dhakal, D.N S., Lecture Notes on "Foundations of Applied Microeconomics for Investment Appraisal," Cambridge Resources International, 2000.

**10:30 – 10:45 Break**

**10:45 – 12:00 Project Financing**

PIARA Faculty

**Readings/  
References:**

- C.W. Beale, Trends in Limited and Non-Recourse Financing, 1984.
- John M. Niehuss, An Introduction to International Project Financing, 1982.

**12:00 – 13:30 Lunch**

**13:30 – 15:00 Participant Presentation of Case 3**

PIARA Participants  
Computer Lab

**15:00 – 15:15 Break**

**15:15 – 19:00 Distribution and Discussion of Case 4: Project Financing Negotiation Exercise: Limassol Juice Company (Development of Strategic Positions)**

**Readings/  
References:**

- Case Four: Andreas Andreou, Glenn P. Jenkins, Savvakis Savvides, "Market Competitiveness, Risk and Economic Return: The Case of the Limassol Juice Company."
- Case Four: "Limassol Juice Company", Negotiation Exercise".

# PROGRAM ON INVESTMENT APPRAISAL AND RISK ANALYSIS

July 8 – August 9, 2002

## WEEK 2, DAY 5

---

### FRIDAY, JULY 19

---

**9:00 – 10:30**      **Project Financing** PIARA Faculty  
**(Project Financing Components)**

**Readings/**      – C.W. Beale, Trends in Limited and Non-Recourse Financing,  
**References:**      1984.  
                         – John M. Niehuss, An Introduction to International Project  
                         Financing, 1982.

**10:30 – 10:45**      **Break**

**10:45 – 12:00**      **Project Financing: A Case Study** PIARA Faculty

**Readings/**      – Crisell, HUB Power – An Innovative Approach To Project  
**References:**      Financing, Euromoney Publication Plc., Essex, UK, 1996.  
                         – Nevitt and Fabozzi, Chapter 10, “Sources of Equity and Debt”  
                         in Project Finance, Euro-money Publications, Rochester, UK,  
                         1995.  
                         – Nevitt and Fabozzi, Chapter 11, “Instruments Used in Project  
                         Financing” in Project Finance, Euro-money Publications,  
                         Rochester, UK, 1995.  
                         – Finnerty, John D, Project Financing – Asset-Based  
                         Financial Engineering, Chapter 3, John Wiley & Sons, 1996.

**12:00 – 13:30**      **Lunch**

**13:30 – 15:00**      **Project Financing Negotiation Exercise: Case 4**  
**(Development of Financing Plan)**

**15:00 – 15:15**      **Break**

**15:15 – 17:30**      **Participant Presentation of Case 4** PIARA Participant

**15:15 – 21:30**      **Completion of Table of Parameters for Major Case** Computer Lab

## **PROGRAM ON INVESTMENT APPRAISAL AND RISK ANALYSIS**

July 8 – August 9, 2002

### **WEEK 2, DAY 6**

---

#### **SATURDAY, JULY 20**

---

<b>9:00 – 10:30</b>	<b>Preparation of Major Case</b>	PIARA Faculty
<b>10:30 – 10:45</b>	<b>Break</b>	
<b>10:45 – 12:00</b>	<b>Preparation of Major Case</b>	Computer Lab
<b>12:00 – 13:30</b>	<b>Lunch</b>	
<b>PM</b>	<b>Barbeque</b>	

### **WEEK 2, DAY 7**

---

#### **SUNDAY, JULY 21**

---

<b>AM</b>	<b>Free Time</b>	
<b>12:00 – 13:30</b>	<b>Lunch</b>	
<b>13:30 – 21:30</b>	<b>Preparation of Major Case</b>	Computer Lab

### **END OF WEEK TWO**

## PROGRAM ON INVESTMENT APPRAISAL AND RISK ANALYSIS

July 8 – August 9, 2002

### WEEK 3, DAY 1

---

#### MONDAY, JULY 22

---

<b>9:00 – 10:30</b>	<b>Measurement of Economic Prices of Non-traded Goods</b>	PIARA Faculty
<b><i>Readings/ References:</i></b>	<ul style="list-style-type: none"><li>– “Chapter Eight: “The Measurement of Benefits and Costs in Undistorted Markets,” in: Cost-Benefit Analysis of Investment Decisions, Glenn P. Jenkins &amp; Arnold C. Harberger, Cambridge Resources International, 2000.</li><li>– Teaching Note #5: “Estimation of Economic Prices for Non-Traded Goods,” prepared by G. P. Jenkins, 2000.</li></ul>	
<b>10:30 – 10:45</b>	<b>Break</b>	
<b>10:45 – 12:00</b>	<b>Measurement of Economic Prices of Non-traded Goods (Continued)</b>	PIARA Faculty
<b>12:00 – 13:30</b>	<b>Lunch</b>	
<b>13:30 – 15:00</b>	<b>Distribution and Review of Case 5: The Economic Appraisal of National Semiconductors</b>	PIARA Faculty
<b><i>Readings/ References:</i></b>	<ul style="list-style-type: none"><li>– Case Five, “The Economic Appraisal of National Semiconductors, Ltd.: Traded and Non-Traded Goods.”</li></ul>	
<b>15:00 – 15:15</b>	<b>Break</b>	
<b>15:15 – 21:30</b>	<b>Analysis of Case 5</b>	Computer Lab

## PROGRAM ON INVESTMENT APPRAISAL AND RISK ANALYSIS

July 8 – August 9, 2002

### WEEK 3, DAY 2

---

#### TUESDAY, JULY 23

---

**9:00 – 10:30**      **Impacts of Rationing and Application to Evaluation of Electricity Projects**      PIARA Faculty

**Readings/References:**

- “Chapter Nine: “Measurement of Benefits and Costs in Distorted Markets,” in: Cost-Benefit Analysis of Investment Decisions, Glenn P. Jenkins & Arnold C. Harberger, Cambridge Resources International, 2000.

**10:30 – 10:45**      **Break**

**10:45 – 12:00**      **Estimation of Economic Benefits of Water ` Sewerage Projects**      PIARA Faculty

**Readings/References:**

- Jenkins, G.P., Barreix, A. and Marchesini, M., “Restructuring the Water and Sewer Utility in Panama”, Harvard University, 2000.

**12:00 – 13:30**      **Lunch**

**13:30 – 21:30**      **Analysis of Case 5**      Computer Lab

## PROGRAM ON INVESTMENT APPRAISAL AND RISK ANALYSIS

July 8 – August 9, 2002

### WEEK 3, DAY 3

---

#### WEDNESDAY, JULY 24

---

<b>9:00 – 10:30</b>	<b>Economic Prices and Conversion Factors for Traded Goods</b>	PIARA Faculty
<b><i>Readings/ References:</i></b>	<ul style="list-style-type: none"><li>– “Chapter Ten: “Economic Prices for Traded Goods and the Economic Price of Foreign Exchange,” in: Cost-Benefit Analysis of Investment Decisions, Glenn P. Jenkins &amp; Arnold C. Harberger, Cambridge Resources International, 2000.</li></ul>	
<b>10:30 – 10:45</b>	<b>Break</b>	
<b>10:45 – 12:00</b>	<b>Economic Prices and Conversion Factors for Traded Goods (Continued)</b>	PIARA Faculty
<b><i>Readings/ References:</i></b>	<ul style="list-style-type: none"><li>– Teaching Note #6: “Estimation of Economic Prices for Traded Goods and Services,” prepared by G. P. Jenkins, 2000.</li></ul>	
<b>12:00 – 13:30</b>	<b>Lunch</b>	
<b>13:30 – 21:30</b>	<b>Completion of Case 5</b>	Computer Lab

## PROGRAM ON INVESTMENT APPRAISAL AND RISK ANALYSIS

July 8 – August 9, 2002

### WEEK 3, DAY 4

---

**THURSDAY, JULY 25**

---

**DUE: 9:00 AM**

**Case 5**

**9:00 – 10:30**

**Economic Cost of Foreign Exchange**

PIARA Faculty

***Readings/  
References:***

- “Chapter Ten: “Economic Prices for Traded Goods and the Economic Price of Foreign Exchange,” in: Cost-Benefit Analysis of Investment Decisions, Glenn P. Jenkins & Arnold C. Harberger, Cambridge Resources International, 2000.

**10:30 – 10:45**

**Break**

**10:45 – 12:00**

**Participant Presentation of Case 5**

Computer Lab

**12:00 – 13:30**

**Lunch**

**13:30 – 18:00**

**Preparation of Major Cases**

Computer Lab



## PROGRAM ON INVESTMENT APPRAISAL AND RISK ANALYSIS

July 8 – August 9, 2002

### WEEK 3, DAY 5

---

#### FRIDAY, JULY 26

---

<b>9:00 – 10:30</b>	<b>Use of Financial and Economic Analysis for Estimating Distributional Impacts</b>	PIARA Faculty
<b>Readings/ References:</b>	<ul style="list-style-type: none"><li>– “Chapter Fourteen: Evaluation of Stakeholder Impacts in Cost-Benefit Analysis,” in: Cost-Benefit Analysis of Investment Decisions, Glenn P. Jenkins &amp; Arnold C. Harberger, Cambridge Resources International, 2000.</li></ul>	
<b>10:30 – 10:45</b>	<b>Break</b>	
<b>10:45 – 12:00</b>	<b>Use of Financial and Economic Analysis for Estimating Distributional Impacts (Continued)</b>	PIARA Faculty
<b>12:00 – 13:30</b>	<b>Lunch</b>	
<b>13:30 – 19:00</b>	<b>Distribution and Analysis of Case 6: Jamuna Bridge Project: Setting Policies, and the Allocation of Risks and Rewards</b>	PIARA Faculty
<b>Readings/ References:</b>	<ul style="list-style-type: none"><li>– Case Six, “Jamuna Bridge Project: Setting Policies, and the Allocation of Risks and Rewards”.</li><li>– “Jamuna Bridge Project: Sensitivity Analysis of Financial Appraisal (Spreadsheet &amp; Sensitivity Tables).”</li><li>– Jenkins, G.P and Shukla, G.P., “Linking East and West Bangladesh,” Canadian Journal of Program Evaluation, 1997, pp. 121-145.</li></ul>	

## **PROGRAM ON INVESTMENT APPRAISAL AND RISK ANALYSIS**

July 8 – August 9, 2002

### **WEEK 3, DAY 6**

---

**SATURDAY, JULY 27**

---

**Day Trip to Ottawa**

### **WEEK 3, DAY 7**

---

**SUNDAY, JULY 28**

---

**13:30 – 17:00**

**Completion of Financial Analysis, Major Case**

Computer Lab

(Due on MONDAY)

**END OF WEEK THREE**

## PROGRAM ON INVESTMENT APPRAISAL AND RISK ANALYSIS

July 8 – August 9, 2002

### WEEK 4, DAY 1

---

#### MONDAY, JULY 29

---

<b>9:00 – 10:30</b>	<b>Estimation of Transportation Costs and Benefits</b>	PIARA Faculty
<b><i>Readings/ References:</i></b>	– Harberger, A.C., “Project Evaluation,” Chapter 10, 1976.	
<b>10:30 – 10:45</b>	<b>Break</b>	
<b>10:45 – 12:00</b>	<b>Estimation of Transportation Costs and Benefits (Continued)</b>	PIARA Faculty
<b>12:00 – 13:30</b>	<b>Lunch</b>	
<b>13:30 – 15:00</b>	<b>Discussion of Case 6: Jamuna Bridge Project</b>	
<b>15:00 – 15:15</b>	<b>Break</b>	
<b>15:15 – 17:00</b>	<b>Participant Presentation of Case 7</b>	PIARA Participant
<b>17:00 – 21:00</b>	<b>Preparation of Major Cases</b>	Computer Lab

## PROGRAM ON INVESTMENT APPRAISAL AND RISK ANALYSIS

July 8 – August 9, 2002

### WEEK 4, DAY 2

---

#### TUESDAY, JULY 30

---

**9:00 – 10:30      The Economic Opportunity Cost of Capital** PIARA Faculty

- Readings/  
References:**
- Chapter “Twelve: The Economic Opportunity Cost of Public Funds” in Cost-Benefit Analysis of Investment Decision Manual, Glenn P. Jenkins and Arnold C. Harberger, Cambridge Resources International, 2000.
  - Little, I.M.D., and J.A. Mirrlees. "Project Appraisal and Planning Twenty Years On," Proceedings of the World Bank Annual Conference on Development Economics, 1990. pp. 351-391.
  - Harberger, Arnold C. “On Country Risk and the Social Cost of Foreign Borrowing by Developing Countries,” Mimeographed, 1976.

**10:30 – 10:45      Break**

**10:45 – 12:00      The Economic Opportunity Cost of Capital (Continued)** PIARA Faculty

**12:00 – 13:30      Lunch**

**13:30 – 21:00      Preparation of Major Cases**

## PROGRAM ON INVESTMENT APPRAISAL AND RISK ANALYSIS

July 8 – August 9, 2002

### WEEK 4, DAY 3

---

#### WEDNESDAY, JULY 31

---

<b>9:00 – 10:30</b>	<b>Economic Opportunity Cost of Labor</b>	PIARA Faculty
<b><i>Readings/ References:</i></b>	<ul style="list-style-type: none"><li>– Chapter “Thirteen: The Economic Opportunity Cost of Labor” in Cost-Benefit Analysis of Investment Decision Manual, Glenn P. Jenkins and Arnold C. Harberger, Cambridge Resources International, 2000.</li></ul>	
<b>10:30 – 10:45</b>	<b>Break</b>	
<b>10:45 – 12:00</b>	<b>Economic Opportunity Cost of Labor (Continued)</b>	PIARA Faculty
<b>12:00 – 13:30</b>	<b>Lunch</b>	
<b>13:30 – 21:00</b>	<b>Preparation of Major Cases</b>	Computer Lab

## PROGRAM ON INVESTMENT APPRAISAL AND RISK ANALYSIS

July 8 – August 9, 2002

### WEEK 4, DAY 4

---

#### THURSDAY, AUGUST 1

---

<b>9:00 – 10:30</b>	<b>Integration of Environmental Analysis with Project Appraisal</b>	PIARA Faculty
<b><i>Readings/ References:</i></b>	<ul style="list-style-type: none"><li>– Asian Development Bank, “Economic Evaluation of Environmental Impacts - A Workbook”, Asian Development Bank, Manila, Chapter 7, Appendix G, H and I, 1996</li><li>– Carson, R.T., “Contingent Valuation: A User’s Guide,” University of California, 1999.</li><li>– Fay, J.A. and Golomb, D., “Air Pollution Control For Indonesia Fossil-Fuel Power Plants”, Cambridge, 1988.</li></ul>	
<b>10:30 – 10:45</b>	<b>Break</b>	
<b>10:45 – 12:00</b>	<b>Integration of Environmental Analysis with Project Appraisal (Continued)</b>	PIARA Faculty
<b>12:00 – 13:30</b>	<b>Lunch</b>	
<b>13:30 – 15:00</b>	<b>Review for Participant Evaluation</b>	PIARA Faculty
<b>15:00 – 15:15</b>	<b>Break</b>	
<b>15:15 – 17:15</b>	<b>Review for Participant Evaluation (Continued)</b>	PIARA Faculty

## **PROGRAM ON INVESTMENT APPRAISAL AND RISK ANALYSIS**

July 8 – August 9, 2002

### **WEEK 4, DAY 5**

---

#### **FRIDAY, AUGUST 2**

---

**9:00 – 10:30      Participant Evaluation**

**10:30 – 11:00      Break**

**11:00 – 21:30      Preparation of Major Cases**

Computer Lab

### **WEEK 4, DAY 6**

---

#### **SATURDAY, AUGUST 3**

---

**9:00 – 12:00      Preparation of Major Cases**

Computer Lab

**PM                  Major Case Meetings**

TBA

### **WEEK 4, DAY 7**

---

#### **SUNDAY, AUGUST 4**

---

**13:00 – 21:30      Preparation of Major Cases**

Computer Lab

**Major Case Meetings**

TBA

### **END OF WEEK FOUR**

## **PROGRAM ON INVESTMENT APPRAISAL AND RISK ANALYSIS**

July 8 – August 9, 2002

### **WEEK 5, DAY 1**

---

#### **MONDAY, AUGUST 5**

---

<b>9:00 – 21:30</b>	<b>Preparation of Major Cases</b>	Computer Lab
---------------------	-----------------------------------	--------------

	<b>Major Case Meetings</b>	TBA
--	----------------------------	-----

### **WEEK 5, DAY 2**

---

#### **TUESDAY, AUGUST 6**

---

<b>9:00 – 21:30</b>	<b>Preparation of Major Cases (whole day)</b>	Computer Lab
---------------------	---	--------------

### **WEEK 5, DAY 3**

---

#### **WEDNESDAY, AUGUST 7**

---

<b>9:00 – 19:00</b>	<b>Completion of Major Cases  (whole day)</b>	Computer Lab
---------------------	---	--------------

<b>19:00</b>	<b>ALL MAJOR CASES DUE</b>
--------------	----------------------------

Submit in hard-copy and electronic form:

1. Write-Up
2. Spreadsheet
3. Presentation



## PROGRAM ON INVESTMENT APPRAISAL AND RISK ANALYSIS

July 8 – August 9, 2002

### WEEK 5, DAY 4

---

#### THURSDAY, AUGUST 8

---

9:00 – 10:30	<b>Presentations of Major Cases</b>	PIARA Participants
10:30 – 10:45	<b>Break</b>	
10:45 – 12:00	<b>Presentations of Major Cases</b>	PIARA Participants
12:00 – 13:30	<b>Lunch</b>	
13:30 – 15:00	<b>Presentations of Major Cases</b>	PIARA Participants
15:00 – 15:15	<b>Break</b>	
15:15 – 17:15	<b>Presentations of Major Cases</b>	PIARA Participants

### WEEK 5, DAY 5

---

#### FRIDAY, AUGUST 9

---

9:00 – 10:30	<b>Where is Project Appraisal ?</b>
10:30 – 10:45	<b>Break</b>
10:45 – 12:00	<b>Where is Project Appraisal? (Continued)</b>
12:00 – 13:30	<b>Closing Ceremony</b>

**END OF PROGRAM**