

## Sustainable Development and International Development Cooperation No. 6

### *Part 2: Development and Environment in Developing Countries*

#### **1. Economy and Society of Developing Countries**

Extreme (Absolute) poverty: less than 1.25 USD/head/day in PPP

Median (Relative) poverty: less than 2 USD/head/day in PPP

- Research question 1: What is poverty? What are the causes of poverty?
- Research question 2: relationship between poverty and development?
- Research question 3: relationship between poverty and environment?

Macroeconomic Balance

Aggregated Supply:  $Y = C + S$

Aggregated Demand:  $Y = C + I$

$I$  (Investment) =  $S$  (saving)  $\leftarrow$  ODA, OOF, FDI, FIDI

The Harrod-Domar Growth Model

Increase of Capital Stock ( $K$ )  $\rightarrow$  Increase of National Income ( $Y$ )

Capital  $\cdot$  Output Ratio:  $k = K/Y = \Delta k / \Delta y$

In case of  $\Delta k = 3$ ,  $\Delta y = 1 \rightarrow \Delta k / \Delta y = 3/1 = 3$

Saving Ratio;  $s = 6\%$

$\Delta y / Y = s/k = 0.06/3 = 0.02 = 2\%$

$S = sY$

$I = \Delta k$

$K/Y = k$

$\Delta k / \Delta y = k$

$\Delta k = k \Delta y$

Then,  $S = I$  (Macro balance)

$I = \Delta k = k \Delta y$

$S = sY = I = \Delta k = k \Delta y$

$sY = k \Delta y$

$\rightarrow \Delta y / Y = s/k$

#### **2. Dual Society and Two Sector Development Model**

2 Sector Development model: Lewis Model, Traditional sector and Modern sector

- Main Characteristics of Developing Economy: Labor surplus and lack of capital
- Traditional Sector: Work at Marginal Productivity = 0 : Hidden Unemployment  
Institutional Wage :  $0S1 = L3q''/0L3$ , Labor ( $L2L3$ ) transfer to Modern Sector  
→  $0S2$ : Increase of Wage
- Modern Sector:  $0W > 0S$ , Expansion of Production in Modern Sector → Increase of Employment
- Traditional sector and Modern sector  
Turning Point:  $N4$ ,  $w4$  : Technical Innovation in Modern Sector (Capital Intensive) ,  
Modernization of Traditional Sector  
Wage;  $w$  = Marginal Productivity (MP) of Agricultural Sector  
 $\gamma = w/MP$   
Increase Ratio of Labor Supply in Modern Sector;  $G (Lm)$   
Increase Ration of Wage in Modern Sector;  $G(Wm)$   
 $\eta = G (Lm) /G (Lm)$

### 3. References

Todaro, M. and S. Smith (2008), *Economic Development*, Longman

### 4. Schedule of Course Work

1. Introduction 9/27

*Part 1: History, Concept, and Theory of Sustainable Development (SD)*

2. History and concept of SD 10/6

3. Theory of SD: Carrying Capacity and MSY 10/13

4. Measuring and Indicators of SD 10/20

5. \* Students make a short report and presentation about your definition and measuring of SD 10/27

*Part 2: Development and Environment in Developing Countries*

6. Development issues: Poverty Trap and Big push 11/10

7. Economy and society of developing countries: Dual society and two sector development model 11/17

8. Development strategy: import substitution and export oriented 11/24

9. Development strategy and environment 12/1

10. \* Students make a short report and presentation about development issues in selected countries. 12/8

*Part 3: Theory and Practice of International Cooperation*

11. History and theory of international development cooperation 12/15

12. PRSP, MDGs, and Paris Declaration 12/22

13. Assessing Aid and environment 1/12

14. \* Students make a short report and presentation about aid and development in selected cases. 1/19

*Part 4: Toward a Sustainable Global Society (governance)*

15. Sustainable global society, global governance and concluding remarks 1/26