



THE GLOBAL ISSUES LECTURE

Dr. Jennifer G. Bailey launched “The Global Issues Lecture” in 2004. This is the 10th Lecture.

“Illiteracy and Economic Development”

- US Illiteracy versus 1st World
- Africa’s High Illiteracy Levels
- Illiteracy, Poverty and Prosperity
- **Solution: Technology–Driven Education**



Speaker: Dr. Jennifer G. Bailey,

For Information: www.baileyinstitute.org



THE GLOBAL ISSUES LECTURE

SHOCKING FACTS ABOUT GLOBAL ILLITERACY

- **18% of people worldwide (1 in 5 people)**
- **69% of the highest illiteracy rates (70+ %) are in Sub-Saharan Africa**
- **39% of the population of India (546 million people)**
- **56.5 % illiteracy (7.6 million) Nepal**
(Asia-Pacific Cultural Center-ACCU for UNESCO-2009)
GOAL-90% Adult literacy by 2015
- **14% of U.S. compared to 1%-5% in other industrialized countries**



Vision... Eradicate Global Illiteracy

- **Why so much tolerance for illiteracy?**
 - Programs to Eradicate poverty
 - Programs to eradicate disease
- **Can you reduce poverty and disease when people are illiterate?**
- **UNDP notes illiteracy's BY-PRODUCTS**
 - Poverty
 - Disease
 - Conflict—(Absence of Peace)

Bailey Institute's Approach to Illiteracy

- One Country at a time
- One Story at a time
- Using Technology-Driven Education



Impact of Illiteracy

Direct relationship between illiteracy and

- Poverty
- Health—Ill Health
- Prosperity—Lack of
- A Nation's Competitive Advantage

Source: United National Development Bank/HDI index 2003-2008



Where is Illiteracy most prevalent?

- Among Developing Countries
- 50 least developed countries have the highest levels of illiteracy
- 69% of these countries are in Sub-Saharan Africa



UNESCO's Partial list: 50 Least Developed Countries

- Afghanistan
- Angola
- Bangladesh
- Benin
- Bhutan
- Burkina Faso
- Burundi
- Cambodia
- Cape Verde
- Chad
- Comoros
- Djibouti
- Eritrea
- Ethiopia
- Liberia
- Myanmar
- Nepal
- Niger
- Rwanda
- Samoa
- Somalia
- Sudan
- Togo
- Uganda
- Tanzania
- Vanuatu
- Yemen
- Zambia



Characteristics of Nations with high illiteracy levels

- **Unequal distribution of income**
- **Technological dualism- hi-tech firms/low-tech methods**
- **Majority of pop in agriculture**
- **Disguised unemployment-2 people do the job of 1**
- **High Pop growth 2.5% to 4%**
- **High illiteracy/weak educational facilities**
- **Malnutrition and health problems widespread**



Characteristics of Nations with high illiteracy levels

- **Political instability**
- **Dependence on a few raw materials for export**
- **Absence of vertical integration – no added value for raw materials**
- **Inhospitable topography- deserts, mountains, tropical forests**
- **Low savings rates**
- **Inadequate financial sector**



1970's Economists Developed the Human-Needs Approach


- **Economic Growth does not = Economic Development**
- HNA defines economic development as :
 - **Poverty Reduction**
 - **Less Illiteracy**
 - **Less Malnutrition**
 - **Less Disease and Early Death**
 - **Shift from Agricultural to Industrial production or**
 - **Service-based economic activity***

*** In the 21st century, service economy requires language and mathematics computer literacy.**



UNESCO's Education for All (EFA)— 2006 Global Monitoring Index States

- **Unless technology-driven education is employed**, 18 million new primary school teachers are needed worldwide to reach universal primary education by 2015.
- The shortage of qualified teachers is characteristic of countries with high illiteracy rates.
- Are there 18 million new primary school teachers waiting in the wings to fill the gap?



In 1990, Pakistani economist Mahbud ul Haq, developed the Human Development Index – HDI

- United Nations Development Program (UNDP) adopted the HDI
- Based on three elements of human life measured by:
 - Life Expectancy
 - Adult Literacy
 - GDP/Capita adjusted for differences in purchasing power



HDI Rankings – Most Developed Countries (UNDP 2008)

<u>HDI Rank</u>	<u>Country</u>
#1	• Norway
#2	• Iceland
#3	• Australia
#4	• Luxembourg
#5	• Canada
#6	• Sweden
#7	• Switzerland
#8	• Ireland
# 9	• Belgium
#13	• United States



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HDI Rankings – Most Developed Countries (UNDP 2008)

HDI Rank

#1	Iceland
#2	Norway
#3	Canada
#4	Australia
#5	Ireland
#6	Netherlands
#7	Sweden
#8	Japan
# 9	Luxembourg
#10	Switzerland
#12	France
#13	Finland
#14	Denmark
#15	Austria
	USA



How does illiteracy contribute to the low U.S.A Ranking?

- **We'll start with the US to show we are not just focusing on emerging nations.**
- US illiteracy rate *14% versus 1%-5% in other developed countries
- **Literacy rates vary sharply by state and county within the US**
- Maryland (State) 11%
 - Baltimore City 16%
 - Montgomery Co. 14%
 - Prince Georges Co. 22%
 - Washington Co. 9%
- Texas (State) 22%
- Mississippi (State) 16%

*National Assessment Of Adult Literacy-2006 (People aged 16+ who are unable to read, write, calculate and comprehend)



% of GDP Spent on Education in Descending Order

• Country	• % of GDP
• Iceland	• 5.4%
• New Zealand	• 4.7%
• United Kingdom	• 4.6%
• Switzerland	• 4.4%
• Mexico	• 4.4%
• Denmark	• 4.5%
• Korea	• 4.3%
• Sweden	• 4.3%
• Belgium	• 4.1%
• Finland	• 3.9%
• USA	• 3.8%

*Expenditure on Primary,
secondary, postsecondary
(non-tertiary education) as
a percentage of GDP*



24 Lowest Ranked HDI Countries?

- **All located in Africa**
 - This highlights the significant development challenges that confront the continent and its residents
 - Millennium Development Goals (MDGs)- established in 1990 by UN and partner international organizations do not reflect encouraging predications.

1st MDG focuses on poverty:

“Reduce by half the proportion of people living on less than \$1 a day by 2015.”

By 2015, 87% of People in Africa will be living on less than US\$2 a day—more than twice the world average.

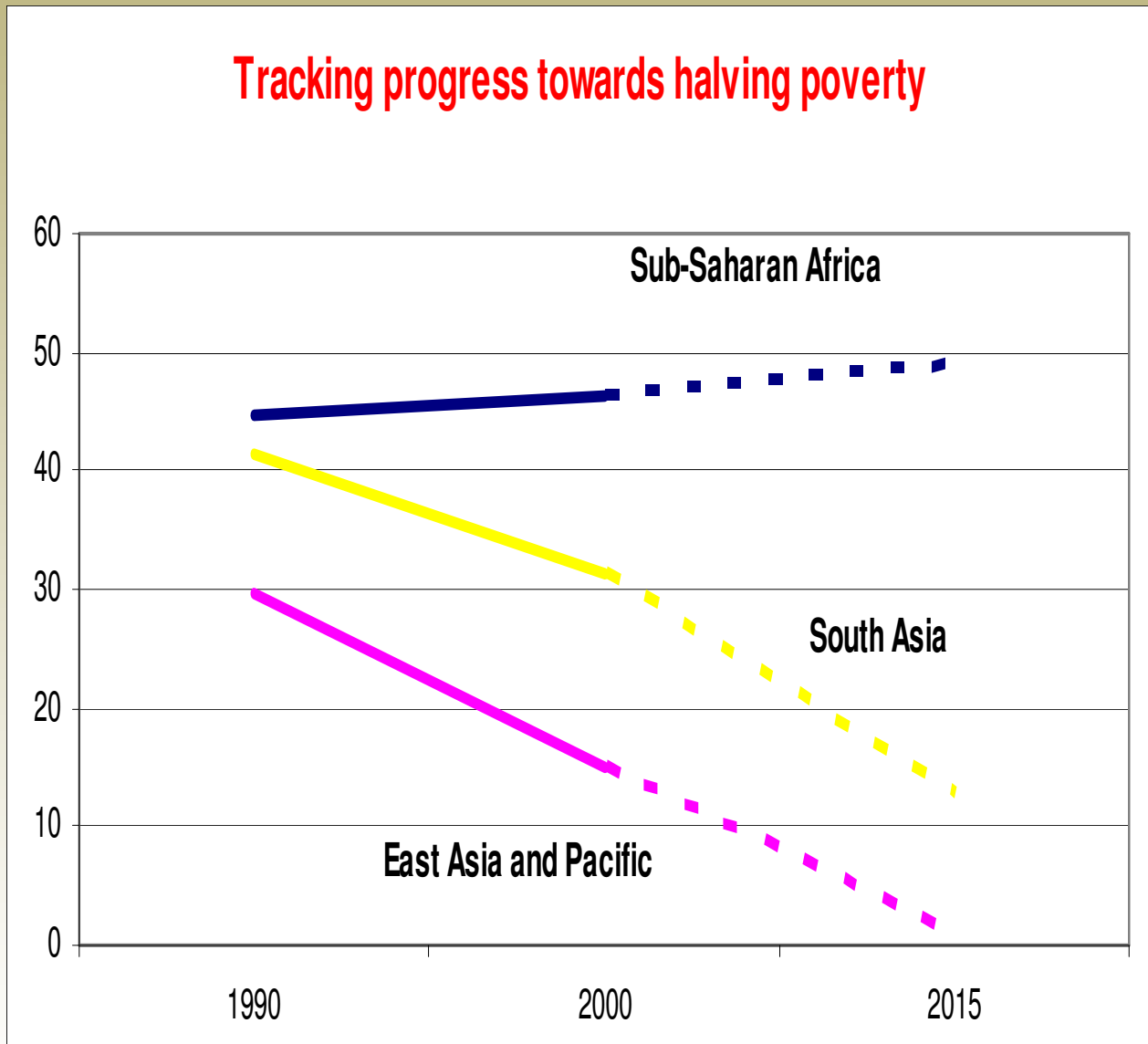
Ref: Hypolite Fofack, World Bank 2006

5th Global Issues Lecture

Progress towards halving poverty

(Fofack, World Bank 2006)

Tracking progress towards halving poverty





Why is HDI so important?

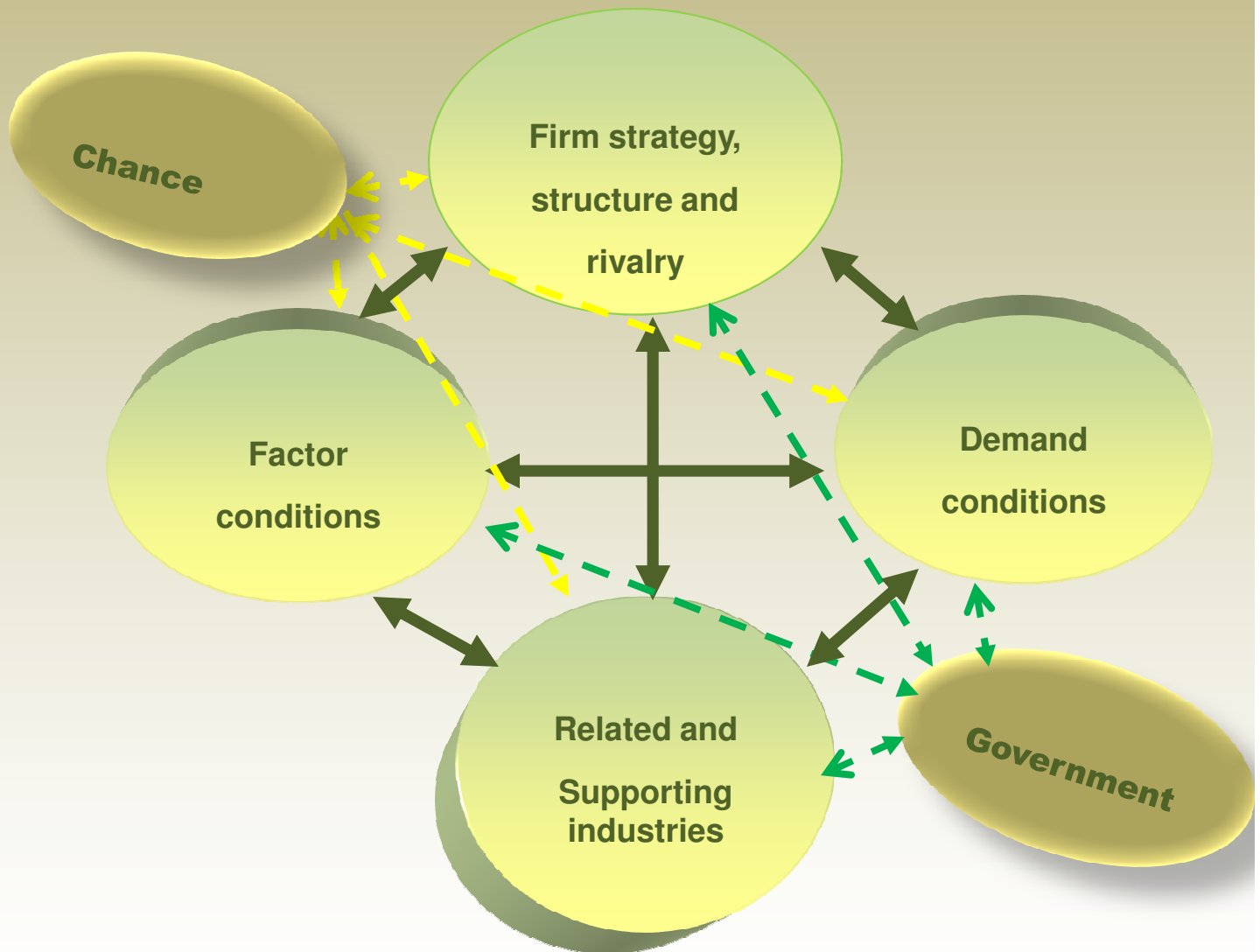
- HDI focuses on more than the rise and fall of national incomes
- HDI is about creating an environment where people develop full potential and lead productive, creative lives
- **People are the real wealth of nations.**
- People who can lead long and healthy lives, who are **knowledgeable**, have access to resources and have a decent standard of living can produce and contribute more fully to the life of the community and the nation.



Illiteracy and Human Capital Michael Porter's Diamond Model (1990)—Competitive Adv.

- **Firm Strategy, Structure and Rivalry:** Competition-innovation- improved productivity
- **Demand Conditions:** Knowledgeable, demanding customers drive improvement
- **Related Supporting Industries:** Proximity to upstream or downstream industries facilitates innovation
- **Factor Conditions:** *Specialized factors of production* are created not inherited—*skilled labor, infrastructure, capital!* *Non-key factors--un-skilled labor and raw materials* can be obtained by any company and hence **do not generate sustained competitive advantage.**

Determinants of National Advantage– Michael Porter, Diamond Model (1990)





Super Large Populations and Illiteracy– India (UNESCO Reports)

- Total Population 1.12 Billion (2008)
- 39% Illiteracy (mostly rural poor)
- After 60+ yrs of Independence
- Most of the poor are:
 - Rural
 - Live in 600,000 Villages

Recommendations (*Science Direct.com*)

- Implement National Policy for Universal Education;
- Use Technology (Deploy Information and Communications Technologies (ICTs))
- Seek partnerships with development organizations to improve education.

FACT: Expenditure on education is 4% of GDP; Education is very good in some areas and non-existent in others.



Super Large Populations and Illiteracy-- China

- **HISTORICALLY: 1949**
- **Population 5,000,000**
- **81% illiteracy**

- **2008: Population 1.3 Billion**
- **Illiteracy reports are inconsistent and difficult to verify**
- **Aggressive national policy to reduce Ill.**
- **Universal education (for all) in place**
- **Quality of education varies greatly from rural to urban areas**

- **FUTURE – to 2015**
- **Millions elevated from illiteracy and plans to sustain this effort.**


Expenditure on education \$102 billion in 2005

Science Direct .com




Lessons from large and super-large populations

- Size and scope of geography are challenges best overcome using technology.
- There are not enough trained human teachers to reach the millions with needs for literacy education
- Neither teachers, resources nor time are available to use traditional chalk and blackboard methods
- Technology-Driven Education is the most cost-effective and time-efficient means for eradicating illiteracy



Since 2006 I have worked in Liberia and Sierra Leone

- To form university partnerships and strengthen institutions.
- Liberia's HDI Index is 176 (4th from last); Illiteracy 80%
- Sierra Leone's HDI Index is 179 (Lowest on the list); Illiteracy 85%
- We made an impact using technology but much more was needed



Bailey Institute's Outcomes with Tech-Driven Education


- In 2007 Bailey Institute shifted its focus to Liberia to address illiteracy in a relatively controlled environment.

RESULTS-2010

- Elevated academic performance of 166 aspiring university students who have now been admitted to the university;
- Achieve gender parity by ensuring 45% of participants are female;

2011-2020 BI-Partnership outcomes

- 910 aspiring university students
- 1040 high school graduates
- 950 out-of-work adults
- Ensure gender parity with 45% females
- Total = 2900 literate, computer-trained individuals added to the workforce.



Why focus on one country?

- The complexity and scope of addressing illiteracy needs in each country is large.
- As we launched our program we concluded there was value in...
- BUILDING HOPE
- ONE STORY AT A TIME
- ONE COUNTRY AT A TIME

In 2011 and Beyond

- Bailey Institute is ready to form new partnerships and re-apply the knowledge gained in Liberia in another context.


Map of Liberia, showing Harper ~ West Africa






Liberia: Geographic and Ethnographic Characteristics

- **Population: 3.4 million people**
- **Large under populated spaces**
- **Rich verdant agricultural land**
- **One official language – English
(Other languages still used)**
- **Manageable interethnic relationships**
- **Great eagerness for progress**
- **Rapid adoption of technology**



TECHNOLOGY-DRIVEN EDUCATION FOR LIBERIA

- **80% of schools and universities destroyed**
- **War created educational gaps for two generations of Liberians.**
- **Age-range of 1st year university students is 22-55; Grade 1 students are 8-20 years of age versus the norm of 6-7 years**
- **80% illiteracy**
- **90% unemployment and large numbers of untrained, out-of-work adults aged 17-45**



TECHNOLOGY-DRIVEN EDUCATION FOR LIBERIA

- High School graduates are not prepared for university or the workplace
- In 2010, 75% of aspiring university students scored at the 7th grade level and below in Language and Mathematics;
- **17,000 elementary/secondary teachers lack a high school diploma and national certification¹**
- Liberia's school age population projected to increase 37% by 2015²


1. Source: USAID-sponsored, Equip 2 AED, 12/06

2. MOE census 2006; Equip 2 AED, 12/06



A post-conflict society (14 years of civic war) Liberia is ripe for rapid, cost-efficient recovery

- **Sustainable technology-driven education: Mathematics, Language, Computer skills;**
- **Life Skills:**
 - **Personal Planning**
 - **Money Management**
 - **Communications skills**
- **Teachers: 4-yr degrees/certified (GED)**
- **Girls' Education in Mathematics and Science**
- **Leadership training to build civic society.**




BEYOND MONEY—The NGO

Model for eradicating illiteracy and fostering economic growth is...

Global Development Practitioners must:

- **Combine best of old: Partnership and Occupation**
- Be present in host countries with 21st century technology, proven curricula, and 24/7 literacy incubators;
- **Hold Training of trainers (TOT) sessions;**
- **Provide face to face mentoring, observation and feedback;**
- Use every form of ICT to stay connected; **Web Conferencing-GoToMeeting;**



Model for eradicating illiteracy: Become more entrepreneurial

- **Become More Entrepreneurial**
 - **Less bureaucratic - More Innovative/nimble; Benchmark;**
 - **Seek objective credibility**
 - **Partnership-Based international development**
 - **Cost and Time Efficient –**
 - **Build sustainable expertise locally**
- **Outcomes:**
 - **Educated productive citizens**
 - **Competitive advantage for the nation**
 - **Economic growth and prosperity;**



THANK YOU

Contact

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“Technology is the 21st
Century’s gift to the poor.
Use it to improve lives and
re-build nations.” J. Bailey