

A world map is centered in the upper half of the slide, with two circular icons containing upward-pointing arrows positioned above it. A thick horizontal bar with a green-to-brown gradient is located below the map.

R & D in ASEAN TO IMPROVE INFORMATION ON FOOD SUPPLY AND PRODUCTIVITY

Mercedita A. Sombilla
Manager, R & D Department, SEARCA

Food Security Technical Group Meeting
Traders Hotel, Singapore 4-5 August 2010

Asia

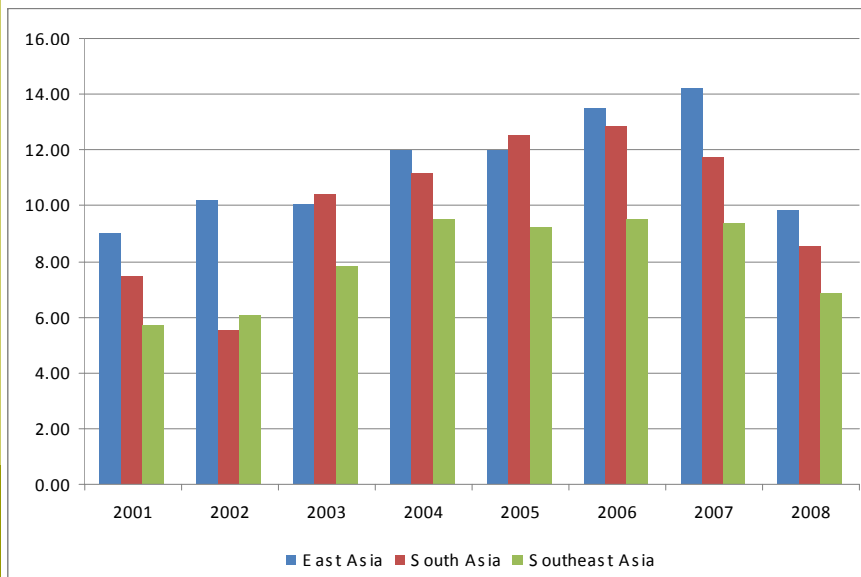
- Accounts to 50% of the global population
- Contributes 15% of the global GDP (current US\$)
- East Asia & Pacific accounts for 26% of global population(2008) and 9% of global GDP
- South Asia accounts for 21% of global population (2008) and 2% of the global GDP

Source: WDI, 2010



Impressive Economic Growth

Annual GDP growth



GDP per capita (current international dollars)



Source: ADB

Note: excludes HK, Bhutan, Maldives, Brunei, Myanmar

Yet about 642 million people in Asia still live at less than US\$ 1.25 a day.

Poverty Reduction Performance

- Most of the poor are in the rural areas where agriculture remains the primary source of livelihood

Country	Year	Poverty Incidence based on National Poverty Line (%)	Number (millions)	Contribution of Rural Poverty to Total Poverty (%)
Cambodia	2004	34.7	4.6	84
Indonesia	2004	16.7	36.3	70
Lao PDR	2003	33.5	1.8	91
Myanmar	2003	32.0	17.0	70
Philippines	2000	34.0	26.2	72
Thailand	2002	9.8	6.2	91
Vietnam	2002	28.9	23.0	92
Bangladesh	2005	40.0	54.8	84
India	2000	28.6	290.6	76
Nepal	2004	30.8	7.6	96
Pakistan	1999	32.6	44.5	74
Sri Lanka	2002	22.7	4.3	67

Sources: World Bank, ADB, NBS-China

Undernourishment in Asia

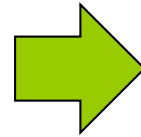
Country	Undernourished (2004-06)		Underweight Children < 5 years of age (%)	Children Under 5 mortality rates (probability of death per 1000)
	Total (millions)	% to total population		
Cambodia	3.5	25	36	90
Indonesia	36.7	16	28	41
Lao PDR	1.0	19	37	61
Myanmar	8.3	17	32	98
Philippines	12.7	15	28	32
Thailand	10.7	17	9	14
Vietnam	11.2	13	20	14
Bangladesh	40.2	28	48	54
India	251.5	22	48	69
Nepal	4.2	16	40	51
Pakistan	36.5	23	38	89
Sri Lanka	4.1	21	29	15

Sources: FAO, ADB

- ❑ Undernourishment, while it has been drastically reduced overtime, is still insurmountable
- ❑ Significant number of people still do not have enough to eat and go hungry including children under five years of age

The Challenge

Reduce Poverty
Improve Food Security
End Hunger



The Key : AGRICULTURAL
GROWTH AND ENHANCING
RURAL ECONOMY

- ❑ To meet the projected food demand in Asia-Pacific, cereal production alone will have to increase by nearly 50 percent and meat production by 85% from 2000 to 2030.
- ❑ Research and technology development are no doubt still the key in achieving food production increases.

Bottlenecks in Increasing Agricultural Production

- Continuing bottlenecks
 - Productivity decline and closing yield gaps
 - Population growth and urbanization
 - Degrading natural resources with environmental footprint
 - Globalization of markets

- New bottlenecks
 - Climate change
 - Market volatility from economic and financial shocks
 - Food-feed-fuel nexus

- Aggravating all these bottlenecks is the dominance of small farms in the region.

Filling the Gaps in Research: “Business Unusual” to reach the poor and the hungry

Spatial Dimension of Research Priorities

	South Asia	Southeast Asia	Pacific
Increased Productivity			
Food Staples	Rice, wheat, local staple cereals, pulses	Rice	Local cereals
Diversified crops/livestock	Horticulture, fisheries, livestock	Vegetables, fruits, aquaculture	Inclusive value adding for niche markets: Vegetables, fruits
Thru science and technology	Germplasm conservation & improvement	Genetic improvement, management of biotic & abiotic stresses	For nutritional security, value-adding Sustaining atoll livelihoods
Improved Value Chain Development (Weak links in the chain)			
Infrastructure: farmer-market links	Post-harvest, agro-processing, ICT Safety & Quality	Post-harvest, ICT Safety & Quality	Post-harvest, Transport ICT Safety & Quality
Markets & networks/partnerships	Public-private-partnerships (PPPs); South-south coop	PPPs South-south cooperation	Niche markets (domestic, foreign) Trade facilitation
Increased Resilience			
Climate change management	Adaptation & mitigation	Adaptation & mitigation	Adaptation & mitigation Need for increased capacity on modeling
Economic Shocks	Rural & non-farm jobs Risk mgt	Resilience to market volatility	Special concerns of atolls

“Business Unusual”: Strengthening Information System

Accurate
Reliable
Timely



Appropriate and sound policies and strategies for further improvement of food security situations

R & D: Strengthening Information of Food Supply and Productivity Changes and Trends

A. Improved data collection, database development and information dissemination/exchange

- **Periodic analysis of supply & demand balances; trade; prices.**
 - guide production planning: allocate scarce resources
 - guide concerned government agencies on commodity import and export strategy

- **Dynamic monitoring, evaluation and impact assessment/risk analysis (including economic viability and ecological compatibility) studies of various technology interventions as well as alternative farming systems**
 - Build confidence of farmers in R&D process
 - Determine appropriate mix of technology components
 - Enhance awareness on benefits of technologies to facilitate adoption as well as acceptance of product outcome
 - Generate evidence and key information for science community and policy makers

- **Assessment of the alternative modes to improve information and database management to facilitate access and exchange of ASEAN member countries.**

Strengthening Information cont'd.....

B. Enhanced Technology Awareness and Dissemination

- **Research on new paradigms of technology transfer and extension**
 - Connect teaching, research and extension institutions, government agencies
 - Synergy among government, NGO, private sector and farmer: development of complementary action plans
 - Assess good models for dissemination and replication

C. Market strengthening

- **Market research: to determine geographic advantage, commodity type, volume, risks, etc to enhance incentives to increase production and for farmers' use in production planning and enhance incentives**
 - Explore regional/sub-regional collaboration (e.g. South-south collaboration) for value chain development and management as well as for joint business development and management.
- **Studies to determine the most appropriate and effective approach to integrate farmers along the value chain. Additionally, researches on comprehensive risk analysis and management along assigned and perceived value chains.**
- **Efficacies of different agri-business models should be researched to provide effective guidance for their adoption. Also to be included is an assessment of innovative business models for financing.**

How can SEARCA support in information system strengthening and management

ORGANIZATIONAL STRATEGY: SEARCA's 9th Five-Year Plan, 2009-2014



- Regionalized operations
- Stronger strategic partnerships, alliances, networks, and linkages

Thank you for your attention
