

A Think Piece

Southeast Asia in the New Millennium: Constraints and Issues for Sustainable Development

by

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Facts and Trends

- Agriculture, and natural resources as a whole, will remain as important sectors of the economy of many Southeast Asian countries, i.e., Cambodia, Indonesia, Lao PDR, Myanmar, Vietnam and the Philippines where agriculture, for example, accounts for 17-60% of GDP of these countries. Even for countries in the region such as Thailand, Malaysia, Singapore and Brunei where agriculture's contribution to GDP have declined to less than 10% during the last decade, concern for food security requires that they will still need to produce a certain percentage of their basic food requirements in terms of grains and cereal products.
- Southeast Asia's population is estimated to reach 665 million by Yr 2020 projected to result in the doubling of demand for cereals from 90 million metric tons in 1990 to 163 metric tons in 2020. This increase in population will not only require increases in food supply but also in terms of greater demand on land, water, and other agricultural inputs provided by the natural resource base. Southeast Asia also ranks third after South Asia and Sub-Saharan Africa in number of malnourished children. With rapidly shrinking farm lands, agriculture alone can no longer adequately provide food and cash needs of most farm families in agriculturally-based countries in Southeast Asia, even if current levels of farm productivity will be doubled.
- There is a predominance but uneven occurrence of poverty in the region ranging from a high of 34.5% in Cambodia in Yr 2000 to a virtual elimination of poverty (based on World Bank criteria) in

Singapore, Brunei and Malaysia. There are a total of 55 million poor people in the region which is much less than in South Asia or East Asia. Within a country in the region, in general, poverty is uneven resulting from differential access to land, credit, education, technology and natural resources. In many of the poverty landscapes of Southeast Asia, i.e., coastal zones, rain fed areas, highlands and ethnic group habitats, there is poor access to basic services such as education, health, transportation, communication and markets, with marginal environments and insecure land tenure or even landlessness.

Marketing of agricultural products is also characterized by increasing competition due to trade liberalization. But, effects of economic liberalization and globalization tend to be uneven. In a situation where necessary and sufficient conditions for taking advantage of the emerging opportunities do not exist, such as with the sectors of the population which have limited assets (skills, natural resources, capital and social), disparities and deprivation could increase. As a result, pressures on natural resources increase and resource use conflicts intensify accentuating land, water and air degradation and other attendant problems. Comparative advantage, human resource quality and capacity and technological efficiency will become key factors in a deepening globalization process in Southeast Asia.

- The combination of poverty and increasing demand on productivity and ecosystem services creates a double squeeze by providing the nexus for rapid deterioration of natural resources in the region; forest, freshwater and marine resources, and agricultural land. Southeast Asia's major asset as a center of high biodiversity and indigenous knowledge systems related to its multi-cultural diversity is being eroded at a fast rate and is continuing to be lost due to rapid urbanization and changing land use, deforestation, pollution, overexploitation and promotion of monocropping. These areas of high incidence of poverty and rapid deterioration of the natural resource base are generally located in uplands, forest and forest reservation fringes, coastal and even in "urban pockets". Human resettlement programs in some countries of the region has also exacerbated this process as these programs tend to even up population distribution without giving adequate consideration on the capacity and nature of the resource base and the knowledge system required for its sustainable use. High population pressure and rapid conversion of agricultural land to non-agriculture use has also considerably fragmented land and decreased available land for cultivation. This trend is a constraint to sustainable development in countries where

population pressure, governance, empowerment and problems with equity distribution provide the forces for a downward spiral of population-resources-human welfare-environment relationships. There is the need to devote more efforts towards the rehabilitation of these degraded ecosystems and natural resource base so that they can be put back into the mainstream of economic development. Sustainable resource management has also become a common challenge for policy makers and planners in forestry, agriculture and fisheries where current efforts are generally characterized as fragmented and are weakly translated into actions.

- There is a general trend of declining public sector funding for agricultural research in the region. This will compel research organizations to commercialize research and concentrate more on short term marketable outputs. There is also the trend of increasing role of the private sector in this area. The concept and strategy of “corporatizing” research is now slowly being implemented in several countries in the region. This will mean that basic research will have lesser priority even if it is necessary in providing support for the long term development of technology and its application for poverty alleviation and environmental protection.
- Information technology (IT) is rapidly advancing and the digital divide could further promote the widening gap in access to technology and resources. However, with the consciousness of the negative aspect of IT, the rapid advancement in this area can be used to draw on global, regional and national knowledge as well as the formal and indigenous knowledge systems required to support technology transfer and promote a more equitable sharing of resources through the adoption of appropriate IPR and tenurial regimes.
- Increasing incidence of conflicts among various socio- cultural groups within a country or between countries in the region with common land, water and air boundaries arising from competition and dispute on ownership and use of resources for economic and security reasons. These conflicts may also arise out of transboundary transfers in impacts of pollution resulting from the extraction and processing of natural resources.
- Rapid development in biotechnology has offered both promise for increased crop production and apprehensions on its long term impacts on human health and the environment. This has also become a flash point of social conflict as the Southeast Asia region becomes a high

potential area associated with both the testing and use of products of biologically-engineered crops and micro-organisms.

Major Issues

Some major issues and constraints for attaining sustainable development in the Southeast Asia region are the following;

- Major emphasis on economic growth while neglecting issues of equity and social justice resulting in the widening economic gap between sectors of society.
- Rapid degradation of the natural resource base- freshwater and marine resources, forest, agroecosystems in terms of land, biota, water, air and environmental services.
- High and uneven incidence of poverty and malnutrition.
- Food, human welfare and environmental security decline against a background of prevailing risks from financial, natural, and health shocks occurring in the region.
- Rising tensions and conflicts over ownership and use of natural resources
- Governance which do not promote participation, decentralization, transparency and accountability.

These major issues and problems which are recognized as constraints to sustainable development in Southeast Asia are not new. They have been identified several decades ago and have differed only in terms of intensity of occurrence against a backdrop of changing political and economic contexts such as the movement towards more democratic governance and an open market economy especially for countries in transition such as Lao PDR, Cambodia and to a certain extent Myanmar. It has also persisted with the evolving development paradigms, i.e., from purely economic growth to economic growth with environmental sustainability to economic growth and poverty reduction cum greater equity. Among others, three major factors contributing to its persistence are identified as follows;

Research approach and the effective transmission and applicability of results

After investing a huge amount of money on research in agriculture and natural resource management, why do issues and constraints for sustainable development persist in the region? What is wrong or what is right about the way we do research?

There is an apparent need to conduct research for development instead of research and development. Most often the research paradigm is generated from the mental constructs of researchers and are likely to be researcher-biased than being able to effectively address a real and perceived problems of farmers and/or fisherfolks as well as other resource users or target sectors. In the research for development approach, linkages with the poor are made from the beginning of problem identification rather than an assumption or expectation that this will apply to the poor. There is also a need to provide the link between and among major stakeholders such as local and national governments, NGO's and people's organizations involved in policy making and implementation. This research approach has generated the various participatory methodologies, i.e. PRA, RRA, Participatory Plant Breeding and others. It also channels the results directly to the community or the target groups for their implementation.

Institutional “amnesia” and the need to install appropriate governance and institutional structures

Lessons generated to guide successful application of research findings leading to appropriate incentive systems for increasing productivity while protecting the natural resource base and promoting equity is often lost. There is no continuity in the focus of implementation of lessons learned with changes in political climate in the context of prevailing power structures. This is true for many countries in the region where these “temporary mechanisms” are present when project funding is available but becomes unsustainable when left to national programs for continued implementation. It cannot be sustained when the proper institutional structures and mechanisms are not in place and the human capacity which will provide support for it is lost or are not fully developed. On the other hand, the scaling up process of the successful approach in terms of stakeholder participation, institutional arrangements and mode of governance are not effective because of this “institutional amnesia” so that “new wheels” are invented whenever changes in the political arena takes place.

Failure of processes

A closer look at the reason for the non-resolution of these constraints and issues will also point to the failure in processes, especially the ones involve in creating public ownership and participation in addressing the issues, thereby creating strong constituencies in pursuit of appropriate reforms. For instance, there is a need for a process of strengthening national and local governance institutions (both statutory and customary) to bring about more robust public response to the identified issues.

Summary Table of Trends, Issues and Policy Concerns in Southeast Asia

Trends	Issues	Policies and Interventions Required
Rapid increase in Population	Uneven increase; population to land ratio is increasing; resultant agricultural extensification and intensification resulting in resource degradation; decreasing farm size and cultivable land	Policy to enhance food security and sustainable livelihood; effective employment of excess farm labor for off-farm employment; effective human resettlement policies and strategies; effective population policies
Prevalence of Poverty and Malnutrition	Rising incidence; widening gap between sectors of society; varied poverty incidence	Policies to promote equitable income distribution; improving policies which tend to favor capital and rent seeking; policies on germplasm access and technology transfer related to IPR and benefit sharing; policy supportive of small to medium scale enterprises along the commodity-chain concept and approach
Increasing Food and Human Welfare Insecurity	Uneven levels across region; uneven ability to produce sufficient food; low access to health and medical services for rural sector	Adoption of biotechnology mired in social opposition and weak long term information on ecological and human health impacts; movement towards free trade

Trends	Issues	Policies and Interventions Required
		constrained by social and technical limits to compete evenly; low level of safety nets; unresolved policy issues on balancing tariffs and domestic support with international obligations; policies on enhancing food safety, improved nutrition and pharmaceutical values of biological diversity
Rising Social Conflicts and Tensions	Determining best measures to reduce tensions and conflicts based on competition for resource use and productivity	Limiting or alleviating social conflicts and tensions through governance and reforms on productivity and enhanced equity; policies to promote participatory planning, assessment and conduct of research on natural resource management
Increasing Deterioration of Natural Resource Base (Biodiversity, water, forests, fisheries and agroecosystems)	Conservation, pricing, distribution and governance of common resources; impact of global climatic change; loss of biodiversity and its associated knowledge system (both scientific and traditional) and institutional base; deterioration of the agroecosystem base; improving use-efficiency of important inputs to production such as water, nutrients and crop/animal protection against consideration for environmental integrity	Valuation and pricing; linking natural resources security to governance and community capacity building cum participatory methods and approaches (community-based approaches); reinforcement of indigenous knowledge systems related to landuse, agrobiodiversity and mountain watersheds; policy for enhancing complementary economic growth of uplands, coastal and urban/agro-industry; policy incentives to promote rehabilitation of degraded ecosystems and

Trends	Issues	Policies and Interventions Required
		diversity in various managed ecosystems

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