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Climate Change: Challenges and Opportunities for South Asia

January 13-14, 2009 Islamabad

Climate Change: Regional Perspective of Agriculture in South Asia

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Agriculture sector in South Asia-an

Overview

Agriculture largest sector of the national economy in South Asia.

Likely to remain so for a few decades in spite of efforts to industrialize due to poor infrastructure, largely illiterate labor force and inefficient marketing to compete in the global markets.

Agriculture sector in Pakistan contributes 24% to GNP and is the main source of livelihood of more than 60% population in Pakistan.

Characteristics of agriculture sector

IN SOUTH ASIA

Dominated by small farmers mainly practicing crop-livestock integrated farming system

Main source of food and fiber, major determinant of national food security

Provides raw material for the agro-industries including textiles, rice milling, sugar, dairy and leather industries etc.

Main source of foreign exchange earnings

Agriculture therefore is the crucial sector which plays a decisive role in the national economy of South Asian countries , especially in alleviation of widespread rural poverty



Agriculture in south Asia is in a state of transformation from low external input (including energy) to intensive chemical and



resource

Demand for agricultural commodities especially food grains have increased rapidly over the decades due to increasing population and rapid urbanization.

Expansion of urban centers resulted in conversion of fertile agricultural land into non-agricultural uses thus reducing the total fertile agricultural land under cultivation.

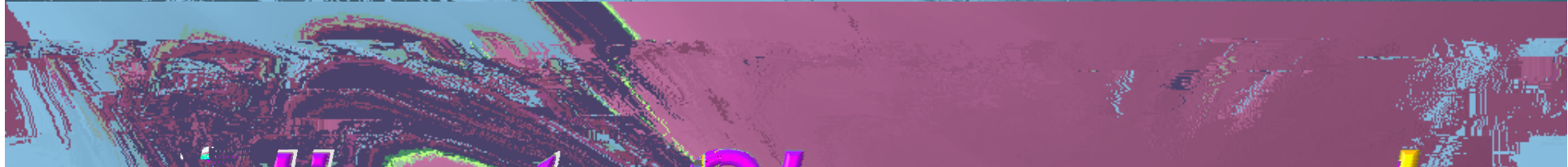
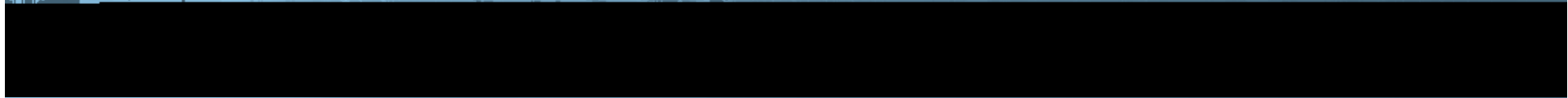


WTO

Current international trade policies especially for agricultural products are disadvantageous for the developing countries.

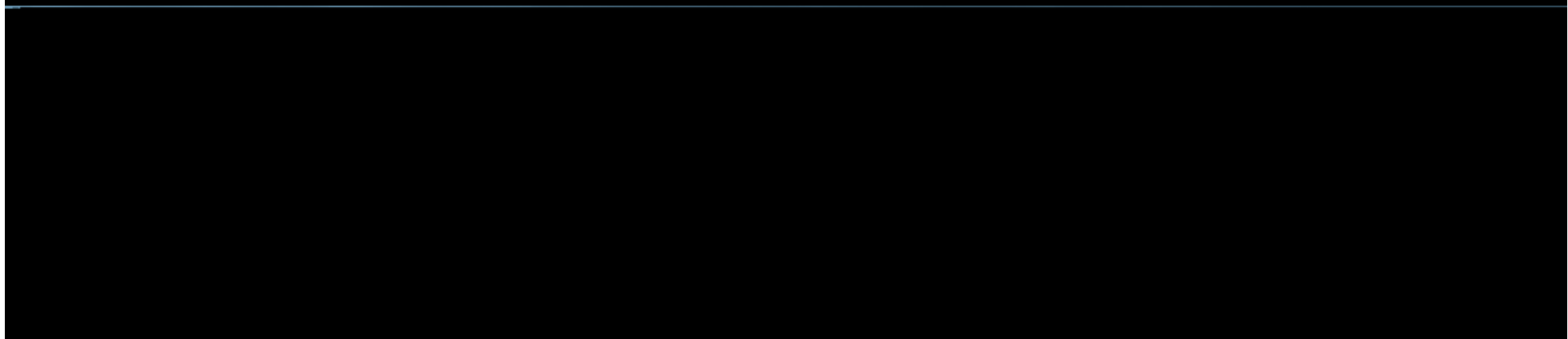
WTO negotiations on agriculture are stalled on the issue of subsidies

Unless this is resolved favorably for the developing countries, their agricultural exports will be at



and

culture



Climate Change and Crop Productivity

Climate change and impacts on agriculture will be vastly different in different sub-regions of individual countries.

On the whole productivity of crops in the sub-tropical and tropical regions likely to decrease.

Temperate regions at northern latitudes likely to have positive impact on crop productivity due to warming trend.

Some arid and semi arid regions which are already hot and dry likely to be rendered unfit for most crops.

To adapt agriculture to CC, it is essential to project detailed weather conditions at different locations at different times of the year.

Changes in temperature and precipitation patterns as a result of climate change will necessitate a re-evaluation of the existing land use patterns especially the cropping patterns to ensure adequate productivity and net farm

Impacts on plant diseases and infestations

Climate change likely to result in emergence of new plant diseases and infestations due to changes in the insect and pathogen complex.

Need to monitor these changes carefully and take measures to meet the changed situation.

Climate Change Impacts on Agriculture

Livestock plays a major role in the agricultural economy in South Asian countries.

Contribution of livestock sub-sector is almost 50% of the total agriculture GDP. In Pakistan.

Effects of climate change on animal health and

