

“Economic Consequences of Global Climate Change for India”

by Dr. Jagadish Shukla



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Dr. Jagadish Shukla led a brainstorming session on **Economic Consequences of Global Climate Change for India** organized at ICRIER on 12 January 2007. It was well attended and assembled experts represented a truly multi-disciplinary team engaged in research on climate change modeling and impact evaluation. Dr. Jagadish Shukla was the special invitee and initiated the discussion. The major concerns raised by the participants in the session are summarized here.

The implications of climate change at the regional level were discussed. It was agreed that adaptation strategies needed to be formulated in keeping with regional level climate and impact assessment models. Developing models for multilateral trade and environment jointly were emphasized. The possibility of an international fund for mitigation and adaptation strategies was also discussed.

In the context of climate models for prediction used in India, the expert meteorologists opined that the annual predictability of these models was quite good, although monthly variability in the predictions was high. As the adverse impacts of climate change may occur earlier than projected by IPCC, it calls for prioritization of the strategies for mitigation and adaptation. The use of the current climate models for mitigation measures and their potential impact was discussed. It was observed that the focus so far has been more on mitigation strategies rather than the adaptation strategies. A suggestion was made to develop an adaptation protocol.

On the issue of debates on development and environment for climate change, the possibility of developing a forum to devise future development pathways based on

climate friendly technologies and innovations was discussed. A discussion on selecting the appropriate rate of discount for environmental valuation and the intergenerational equity aspect also took place.

It was suggested that the West should contribute through less energy intensive technologies and by facilitating adoption of CDM with equity considerations. The developing countries need to think of innovative climate friendly technologies to maintain sustainable growth. Equity issues, however, need to be addressed with respect to technology transfer. It was also discussed how best to understand the conservation of natural resources through developing an information base. This will help adapt to any potential reduction in the availability or change in distribution of the natural resource as a result of climate change. For this, a coordinated initiative across government departments is required.

Opinion was voiced that the adoption of new technology from the West should be such that the burden of incremental costs of clean technology are borne by the developed world. The experts were of the opinion that the adoption of new technology from the West should be necessarily coupled with IPR transfer. The issues of linking the environmental clauses with WTO's technical barriers to trade, and western subsidies for environment friendly initiatives were also discussed.

Dr. Rajiv Kumar, Director & CE, in his summation pointed out that world-wide changes in agriculture would have implications for food security, trade and agricultural policy both within India and across nations. He also raised the issue of India's role in providing leadership in innovating on production and consumption changes in the economy. Prof. Shukla concluded by highlighting the importance of bringing together individuals and institutions concerned with climate change research for working out a programme of climate research which would be relevant in addressing India's concerns for economic growth and poverty reduction.