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Applications of Environmental Economics: Policies Adopted by China

Sreshtha Roy Chowdhury¹, Dr Bharati Hiremath²

¹PG student, Department of International Relations, Maharaja's College, University of Mysore ²Asscociate Professor, Head and Coordinator, Department of International Relations, Maharaja's College, University of Mysore, Mysuru, India

Abstract:

China's commitment to environmental economic policies remains steadfast. The 14th Five-Year Plan outlines ambitious targets for pollution control, carbon neutrality, and sustainable development. China's Belt and Road Initiative present an opportunity to export its green technologies and promote sustainability globally. Collaboration with international partners and knowledge sharing will be crucial in addressing transboundary environmental issues and accelerating progress toward a more sustainable future.

Introduction

At the global level, environmental economics has many applications, and it plays a critical role in policy-making, resource management, and sustainable development. One of the primary applications of environmental economics at the global level is in climate change research, environmental economics has applications in analyzing environmental policy and regulation. Environmental economists evaluate the costs and benefits of different policy instruments and analyze the effectiveness of environmental regulations. They also study the impact of environmental policies on the economy and develop policies that balance environmental protection and economic growth. Overall, the applications of environmental economics at the global level are broad and diverse. Environmental economists play a critical role in policy- making, resource management, and sustainable development, and their work is essential for addressing the environmental challenges facing the world today.

China: A Pathway to Sustainable Development

Introduction: In the due event of recent times, we can evidently say that China has experienced remarkable growth, making itself fit the status of a global economic powerhouse. However, this rapid development has not come at a free cost but cost a significant result on the environment, with air and water pollution, deforestation, and greenhouse gas emissions reaching alarming levels. Hence the arises an urgent need to address these environmental challenges, regarding which China has implemented a series of ambitious environmental economic policies. Now the main focus of this article examines the recent environmental and economic policies adopted in China, mainly highlighting their goals, impacts, and future prospects.

Transition to Clean Energy: China has made important substantial progress in shifting its energy mix towards cleaner sources. The government has made measures to increase the share of non-fossil fuel energy to 20% by 2030, and renewable energy sources such as solar and wind power have experienced rapid growth. Hence the impact of these policies has been on the positive side, as China in its current state has become the world's largest producer of renewable energy. And thus reducing its reliance on coal and taking a step towards promoting clean energy alternatives, moreover, China aims to combat air pollution, mitigate climate change, and create a sustainable energy future.

Environmental Taxation: China has introduced environmental taxes to incentive businesses and individuals to reduce pollution and resource consumption. The main purpose of these taxes target air and water pollutants, solid waste, and noise pollution. Thus, by imposing taxes based on the environmental impact of certain activities, the government very well aims to encourage polluters to adopt cleaner technologies and practices. This policy not only provides economic incentives for sustainable behavior but also generates revenue that can be used to fund environmental protection initiatives.

Emission Trading System (ETS): Greenhouse gas emissions are a major problem so, In an effort to control greenhouse gas emissions, China has implemented the largest carbon trading market in the world. The ETS has set up a cap on emissions for power generation, iron, and steel industries. Thus, allowing companies to buy and sell emission permits, creating a market mechanism that incentives emissions reduction. Moreover, the ETS encourages industries to adopt cleaner technologies and practices while promoting a low-carbon economy. By incorporating market forces into environmental regulation, China aims to achieve emission reduction targets in a cost-effective and efficient manner.

Ecological Civilization: The concept of ecological civilization lies at the heart of China's environmental economic policies. It emphasizes the integration of economic development with environmental protection, seeking to create a harmonious relationship between humans and nature. China has implemented measures to protect and restore ecosystems, such as afforestation projects, wetland conservation, and biodiversity preservation. These initiatives not only contribute to environmental sustainability but also provide economic opportunities through Eco-tourism and the development of green industries.

Impacts and Challenges

China's environmental economic policies have yielded positive results. Air quality has improved in major cities, renewable energy production has surged, and carbon intensity has decreased. The implementation of the ETS has stimulated innovation and technological advancements in emissions reduction. Furthermore, these policies have created green jobs, stimulated economic growth in the clean energy sector, and enhanced China's international standing as a leader in environmental stewardship.

However, challenges remain. China's sheer size and the scale of its industrial activities pose ongoing difficulties in implementing and enforcing regulations. Coordination among various government agencies, at both the national and local levels, needs improvement to ensure effective policy implementation. Additionally, balancing economic growth and environmental protection requires careful calibration to avoid potential conflicts.

Conclusion

Hence in short, we can conclude all the adopted policies on the account of environmental economic policies in recent years by China, are:

1.Emissions Trading System: China launched its first emissions trading system in 2017, which aims to reduce carbon emissions from the power sector.

- 2.Green Finance: China has established a green finance system to encourage investment in environmentallyfriendly projects.
- 3. Carbon Tax: China has introduced a carbon tax in several cities to discourage carbon emissions.
- 4.Renewable Energy: China has invested heavily in renewable energy sources such as solar and wind power, which has helped reduce carbon emissions.
- 5.Energy Efficiency: China has implemented energy efficiency measures to reduce energy consumption and carbon emissions.
- 6.Environmental Protection Fee: China has introduced an environmental protection fee to discourage pollution and encourage environmentally-friendly behavior.
- 7. Environmental Impact Assessment: China has introduced an environmental impact assessment system to ensure that new projects do not harm the environment.
- 8.Environmental Protection Law: China has updated its environmental protection law to strengthen environmental regulations and penalties for violations.
- 9. Clean Air Action Plan: China has launched a Clean Air Action Plan to reduce air pollution and improve air quality.
- 10. Environmental Protection Tax: China has introduced an environmental protection tax to discourage pollution and encourage environmentally-friendly behavior.

Thus, we can conclude by saying that, Global environmental challenges, such as climate change, biodiversity loss, and water scarcity, have significant economic implications and require policy responses at the global level. Environmental economics can provide insights into the economic causes and consequences of these challenges and the effectiveness of policy interventions, which can further help to provide decision-makers with information on the costs and benefits of different policy options for addressing global environmental challenges. This information can help policymakers make informed decisions and design effective and efficient policies. If global environmental policies are effectively designed and implemented, then the economic, social, and environmental impacts of global environmental challenges can be minimized while promoting sustainable development and achieving the objectives of international agreements and the valuation of ecosystem services, and the sustainable use of natural resources can be effectively integrated into policy design. Which in the long-term economic and environmental terms can benefit global environmental policies. Moreover, global environmental policies are strengthened through better governance and stakeholder coordination, which in turn makes the effectiveness and efficiency of policy implementation to be improved, the barriers to policy implementation can be overcome and the ethical dimensions of global environmental challenges and policies can be effectively addressed in policy design and evaluation, where the fairness and equity of policy outcomes can be improved, and the social acceptance and legitimacy of global environmental policies can be enhanced.

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