





Climate Change and Environment in the Arab World



Jad Chaaban & Souheil Abboud

Jad Chaaban, PhD, is an assistant professor of Economics at the Department of Agricultural Sciences, AUB. Chaaban holds a Masters in Economics of the Environment and Natural Resources and a PhD in Economics from the Toulouse School of Economics. His main research interests include the Industrial Organization of Agro-food Sectors, Public Economics, Economics of Development and Environmental Economics.

Souehil Abboud is the Middle East Regional Director of EcoSecurities. Abboud has 10 years of international experience in developing, managing, structuring and financing renewable energy and energy efficiency projects / companies in Canada, Southeast Asia and the Middle East.

The Issam Fares Institute for **Public Policy and International** Affairs (IFI) at the American University of Beirut (AUB) was inaugurated in 2006 to harness the policy-related research of AUB's internationally respected faculty and other scholars, in order to contribute positively to Arab policy-making and international relations. IFI is a neutral, dynamic, civil, and open space that brings together people representing all viewpoints in society. It aims to: raise the quality of public policy-related debate and decision-making in the Arab World and abroad; enhance the Arab World's input into international affairs; and, enrich the quality of interaction among scholars, officials and civil society actors in the Middle East and abroad.

Carbon trading: A potential for Arab countries to abate climate change

Carbon emissions trading provides a financial incentive for Arab countries to mitigate the effects of climate change, but they still need to reduce carbon emissions and follow the Kyoto Protocol in an international effort to fend off global warming.

This was the view from academia and the private sector on carbon trading as a climate change mitigation strategy for the Arab world, presented during a recent lecture at the American University of Beirut (AUB).

The Issam Fares Institute for Public Policy and International Affairs (IFI), under its Forum on Climate Change and Environment in the Arab World, brought together Jad Chaaban, assistant pro-

fessor of Economics at AUB, who presented the economic theory of carbon emissions reduction and trading, and Souheil Abboud, Middle East Regional Director of EcoSecurities Group, a carboncredit company, who spoke of the untapped potential of carbon trading in the Arab World.

The global imbalance between the world's carbon emissions producers – developed nations – and those who will suffer most from climate change – the poorest nations – is a legal and economic problem, said Chaaban. Global carbon trading is one way to address the imbalance, but it requires a degree of global cooperation from both polluters and non-polluters that is unlikely, according to economic theory.

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Alternatively, the private sector presents a view of thriving business with benefits for all: "It's a shame that Arabs are not benefiting from this industry," said Abboud. The carbon trading business jumped from non-existent ten years ago to a \$60 billion industry in 2007, he said.

Economically sound, practically impossible

Twenty percent of the world's population – living in the richest countries – emits 70 percent of the world's carbon dioxide, but the poorest countries will suffer disproportionately due to their susceptible landscapes and climates. "This global imbalance creates equity concerns and requires uncommon solutions," said Chaaban.

Richer countries need more energy, consume more fuel, and thus emit more carbon dioxide. They present "inter and intra generational equity concerns," he said, "between the developed and developing countries, and between generations within each country."

"Can economics help reduce carbon emissions?" enquired Chaaban, outlining the perfect scenario – a global cooperative solution to control carbon emissions in three steps: governments

The Research and **Policy** Forum on Climate Change and **Environment in the Arab World** provides a mechanism that brings together AUB professors, other academics and researchers, civil society, the private sector and policymakers. By promoting close interaction between researchers and policymakers, it aims to help formulate more effective environmental policies in the Arab World, and to mitigate the impact of expected climate change scenarios and other environmental challenges. The AUB-IFI Climate Change Forum comprises lectures, research, publications, comprehensive regional databases of scholars and research, and regular workshops, seminars and conferences.

Rami G. Khouri IFI *Director*Dr. Nadim Farajalla *Faculty Research Director*Sarine Karajerjian *Program Coordinator*

You can listen and watch the lecture on Youtube on IFI website: http://staff.aub.edu.lb/~webifi/ put a cap on emissions, country-specific targets are set, and countries adjust their emissions according to those targets. This cooperative scenario is impossible for several reasons, said Chaaban. Game theory suggests that "free-riders" like Arab countries, which are not obliged under the Kyoto Protocol to reduce their carbon emissions, will continue to pollute.

Presenting these countries with figures may help move them into action: emissions-driven climate change will claim up to 20 percent of future families' income around the world via GDP losses

Financial incentives to reduce carbon emissions

The Middle East trades an average of one million carbon credits – or CERs – per year, at \$10 per

credit. Without obligation to reduce carbon emissions, Arab countries sell credits to developed countries under the Kyoto Protocol's Clean Development Mechanism (CDM).

Their lack of participation in the industry is "pathetic" said Abboud, noting that there is potential for the industry to benefit many sectors: oil and gas, waste management, landfills, industrial gases, agriculture, energy efficiency, and transport.

The implementation of credit swaps requires a Designated National Authority (DNA) at the national level, which exists in Lebanon. But the trading infrastructure is still weak in the region, with the banking sector slow to pick up, said Abboud.

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Coupled with a weak policy-enabling environment, the future of carbon trading in the Middle East remains a challenge."

The key components of the carbon market are not developed," said Abboud, noting the lack of project developers and financial institutions with a good understanding of the industry. Legal and government hurdles are also a factor: "Amazing bureaucracy is delaying CDM progress in this part of the world."



Issam Fares Institute for Public Policy and International Affairs

American University of Beirut

408 Diana Tamari Sabbagh (DTS) Building PO Box 11– 0236, Riad el Solh Beirut 1107 2020, Lebanon Tel: 961–1–350000, x 4150 Fax: 961–1–737627 e-mail: ifi@aub.edu.lb



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Lectures, Seminars and Workshops hosted by IFI's Research and Policy Forum on Climate Change and Environment in the Arab World:

"Post- Kyoto Policies: How Can Arab Countries Meet Climate Change Challenges after 2012?"
Wael Hmaidan, Executive Director of IndyAct - The League of Independent Activists

"Are Changes in Insect Patterns in the Lebanese Mountains Evidence of Climate Change?"
Nabil Nemer, Research Associate at the Faculty of Agricultural and Food Sciences, AUB

"The Tripod of Academia, Government and Private Sector: From Science to Policy Making"
Berj Hatjian, Director-General of the Directorate General of the Lebanese Ministry of Environment

"Innovations in Climate Protection Policies - What Can the Arab World Learn from European Countries?" Danyel Reiche, Assistant Professor, PSPA Department, AUB

"Combining Energy Efficiency and Renewable Energies: The Key to Sustainability"

Peter Hennicke, former President of Wuppertal Institute for Energy and Environment, Germany

"Renewable Energy Policies: What can the Middle East learn from the European Experience?" Stefan Schurig, Director of Climate Energy, World Future Council

"Climate Change, US Agricultural Policy, and Food Security: Lessons and Implications for the Middle East?" Eric Schuck, Fullbright Visiting Professor, Department of Agricultural Sciences, AUB

World Water Week in Stockholm: "Exploring an Arab Riparian Jordan River Basin Initiative" Seminar - Arab initative with renowned water experts from AUB and the region

Vulnerability, Adaptation and Mitigation Scoping Meeting of the "Enabling Activities for the Preparation of Lebanon's SNC to the UNFCCC" Project and NEEDS Inception Workshop
Co-hosted with Lebanon's Ministry of Environment, UNFCCC, GEF, UNDP and Elard