

TURKEY TOWARDS A NEW DEVELOPMENT PATH? GLOBAL CLIMATE CHANGE AND DEVELOPMENT POLICIES

Development concerns always stand at the heart of international environmental cooperation. Yet sometimes misguided development plans and priorities might hinder future development and create unprecedented environmental challenges. Though some of the impacts of climate change are already visible and to a larger extent affect developing countries, adaptation and mitigation sometimes lag behind scientific evidence and projection. Mainstreaming climate policies into development planning is therefore essential, both for developed and developing countries to successfully adapt to the impacts of climate change. Turkey, after becoming a party to the United Nations Framework Convention on Climate Change (UNFCCC), has accelerated its efforts to take action with regard to climate change.

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Development and Climate Change: A Sustainable Future

In one of its recent documents, the Organization for Economic Cooperation and Development (OECD) presents the tragic history of the Polynesian Easter Island as a good example for understanding how the “relationships of humans to the environment has always been one of give and take.”¹ The island is probably one of the most extreme examples of forest destruction that began long before the 18th and 19th centuries, when the first European explorers paid a visit to this remote place.² Still, the Easter Island is not the only example of ecological destruction in the history of mankind: Legends, old stories and mystic teachings always refer to vanishing societies and civilizations due to natural disasters in the ancient times. Yet, we do not know exactly which of them disappeared due to volcano eruptions or tsunamis or due to extensive deforestation, soil erosion, floods or any other large scale disaster caused by human activities. Besides, there is a significant possibility that not all of these disasters happened unexpectedly, but instead they slowly and gradually evolved and forced people to leave their homelands. Today we are likewise experiencing these slow evolving calamities all over the world but we still tend to disregard them. We prefer responding to the sudden catastrophes and try to take reactive measures to remedy the damages. No remedies can, however, prevent environmental degradation in the end.

Whether slow or sudden, environmental degradation threatens human well-being in many aspects and affects current and future development plans. Global climate change is one of those slowly evolving catastrophes. Unprecedented rise in living standards during the last two centuries –life standards that heavily depend on fossil fuel energy– have engendered this threat. Since global climate change is closely related to our daily choices, mainly with regard to energy production and consumption in all sectors of the economic and social life, we undoubtedly have to revise our resource intensive life styles and development paradigms all around the world.

The link between development and climate change is striking: For more than two centuries development patterns that we have been following have been connected to imprudent use of natural resources and environmental damage, paving the way for unanticipated environmental challenges like climate change. Due

¹ Tracey Strange and Anne Bayley, *Sustainable Development, Linking Economy, Society and Environment*, *OECD Insights*, (OECD, Paris, 2008), p.11.

² *Ibid.*

to climate change, in return, current investments, development priorities and targets were negatively affected, especially in countries with high vulnerability to climate change but weak adaptive capacity. The impacts of climate change, from increased climate variability to sea level rise have major effects on the economic growth of developing countries. Key sectors that are directly affected by climate change can be listed as health, water supply and sanitation, energy, transport, industry, mining and construction, trade, tourism, agriculture, forestry, fisheries, environmental protection and disaster management.³ According to the World Bank climate risks can be classified in three categories: direct threats to investments, underperformance of investments and maladaptation.⁴ Therefore, sustainability is and should be the key component of all development plans and climate change policies.

Yet there is no blueprint for sustainability though the UNFCCC and the Kyoto Protocol draws the general framework for mitigation and adaptation policies with special emphasis on sustainable development. There is an urgent need for such a blueprint and for mainstreaming economic growth and ecological considerations. Briefly, mainstreaming “entails making more efficient and effective use of financial sources rather than designing, implementing and managing climate policy separately from ongoing activities.”⁵

In a world where mitigation and adaptation policies that are formulated to cope with the causes and impacts of climate change lag behind the pace of climate change, mainstreaming seems the only possible way to reduce the effects of climate change. Mainstreaming also eliminates difficulties and decreases costs of action under conditions of uncertainty. Indeed it might be the best possible way to achieve economic growth for developing countries while at the same time reducing their greenhouse gas emissions.

Neither UNFCCC nor the Kyoto Protocol imposes any commitment to developing states to curb their greenhouse gas emissions. Yet, scientific evidence compels all states to take action in order to halt greenhouse gas emissions. This can only be realized through the principle of common but differentiated responsibilities and respective capabilities. While proposals for the architecture of the

³ World Bank, *Managing Climate Risk: Integrating Adaptation into World Bank Operations*, (World Bank, Washington, 2006), p.3.

⁴ *Ibid.*, p.7.

⁵ Siri E.H. Eriksen, Richard J.T.Klein, Kirsten Ulsrud, Lars Otto Næss, Karen O'Brien, *Climate Change Adaptation and Poverty Reduction: Key Interactions and Critical Measures*, Report prepared for the Norwegian Agency for Development Cooperation (Norad) (GECHS, University of Oslo, Oslo, 2007), p.11.

post-Kyoto regime have been thoroughly discussed and debated, developing country emissions still remain an unresolved issue. At present, and for the near future, it seems impossible for developing countries to take any binding commitments to reduce their greenhouse gas emissions. Nevertheless, recognizing climate change as a development challenge will help developing countries achieve sustainability⁶ and to accomplish the desired level of economic growth while protecting the environment in a carbon constrained future.⁷

Mainstreaming can also motivate bigger economies to reduce carbon emissions, while facilitating the efforts of developing countries to reach their economic targets.⁸ However, the shift to a low carbon economy is certainly a big challenge requiring long-term commitment with a clear cut break with existing paradigms.⁹ It can certainly be expected that mainstreaming will create full employment if significant investments in the public and private sector as well as smarter development initiatives are pursued.¹⁰ Therefore, phasing out dirty technologies, replacing the old energy systems with renewable energy systems and avoiding investments on high emitting technologies are the essential actions to be taken for a low carbon future.¹¹ Yet accomplishing such changes is not easy: To begin with, old technologies are cheaper and are going to stay cheaper in the near future, compared to some green technologies. Therefore more green technologies need to be improved and made cost competitive.¹² These objectives cannot be solely achieved by private sector initiatives. Climate friendly spatial planning of economic sectors, for instance, can minimize energy demand and reduce greenhouse gas emission arising from transportation. The same is true for urban and regional planning. None of this can be reached without determined government policies. Thus as important as cooperation among stakeholders is, coordination among different departments of government is likewise essential to generate an integrated development strategy with a vision of sustainable energy use.¹³

⁶ UN World Economic and Social Survey 2009, *Promoting Development, Saving the Planet*, (United Nations Publication, New York 2009), p.x.

⁷ Ibid, p.3.

⁸ Ibid, p.29.

⁹ Ibid, p.29-30.

¹⁰ Ibid, p.105.

¹¹ Ibid, p105-106.

¹² UN (2009), p.105.

¹³ Ibid.

Turkey, Climate Change and Development

Reducing greenhouse gas emissions has always been a contentious issue for Turkey. As an EU candidate country and a founding member of the OECD, Turkey is in a very difficult position regarding its commitments. The heated debates on Turkey have started with the Intergovernmental Negotiating Committee for a Framework Convention on Climate Change. Since all OECD members were automatically required to sign Annex I of the Framework Convention, Turkey was required to become a party to both Annexes, hence committing to a reduction of greenhouse gas emissions to 1990 levels by the year 2000 and providing financial assistance and facilitating technology transfer to developing countries. Claiming that its level of industrialization is not comparable with most of the OECD countries, Turkey rejected to become a party to both Annexes.¹⁴ Although Turkey did not sign the UNFCCC in 1992, it was accredited observer status and participated in all meetings and submitted reports as a sign of its good will and willingness to fulfill its commitments in line with the principle of common but differentiated responsibilities.

In 1999 a Specialized Commission on Climate Change was established by the State Planning Organization (SPO) and published a Special Commission Report on climate change in 2000 in preparation for the 8th Development Plan. This plan integrates the reduction of greenhouse gas emissions into Turkey's development plans. After arduous long negotiations and only when the "special circumstances" of Turkey were acknowledged at the COP 7 in Marrakech, Turkey became the 189th party to the UNFCCC on 24 May 2004. Turkey submitted its First National Inventory of Greenhouse Gases to the UNFCCC Secretariat in 2006. A year later the First National Communication of Turkey on Climate Change was prepared and submitted to the UNFCCC Secretariat. This report defined the national circumstances and explained mitigation and adaptation policies of Turkey.

Given its population growth and industrialization, reduction of greenhouse gas emissions is a great challenge for Turkey. However, as a candidate country, Turkey has to comply with the EU *acquis communautaire*. The EU, positioning itself as a leading actor in climate change mitigation agreed to reduce its greenhouse gas emissions by 20 percent by at the latest 2020, regardless of other countries

¹⁴ The Ministry of Environment and Forestry, *The First National Communication on Climate Change*, Republic of Turkey, (The Ministry of Environment and Forestry, Ankara, January 2007), p.6.

actions, and to reduce the emissions by 30 percent “if there is an international agreement committing other developed countries to contributing adequately according to their responsibilities according to their responsibilities and respective capabilities.”¹⁵ The EU also declared its commitment to increase the share of renewable energies in overall EU energy consumption by 20 percent by 2020. Considering the above mentioned, Turkey has to plan its development and investments very carefully.

According to the Prime Ministry State Statistical Institute, Turkey’s population is 71,517,100 as of 31 December 2008 and 75 percent of the population lives in big cities and town centers.¹⁶ Since its population growth rate is higher than those of other Annex I countries, Turkey has to cope with higher rates of consumption of natural resources and higher levels of greenhouse gas emissions. On the other hand, Turkey has great potential to produce renewable energy, with resources reaching from wind power to solar energy. Many legal developments took place recently along these lines, despite financial difficulties with regards to the utilization of renewable sources.¹⁷

Furthermore, Turkey also has significant potential to reduce its greenhouse gas emissions through low cost measures in the sectors of construction, transportation and industry:¹⁸ For example, cities face ever-increasing levels of natural resource consumption and a rising demand for inner-city transportation, increasing the level of greenhouse gases.¹⁹ For instance, 20 percent of Turkey’s population lives in Istanbul. The rate of population growth has slowed down since the 1990s; however, it is still among the largest OECD-metro regions.²⁰ However it should be considered that although Istanbul is the commercial and even industrial center of Turkey, the city itself and its close vicinity are still rich in biodiversity.

Nevertheless accompanied with urban sprawl and changes in consumption patterns, the needs of growing population in Istanbul have been even damaging the

¹⁵ Commission of the European Communities, *Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions, 20% by 2020 Europe’s climate change opportunity* Brussels, 23.1.2008 COM (2008) 30 Final, p.2.

¹⁶ TÜİK, *T.C Başbakanlık Türkiye İstatistik Kurumu Haber Bülteni, Sayı 14*, 26 January 2009.

¹⁷ The Law on Utilisation of Renewable Energy Resources for Electricity Production Purposes (the Renewable Energy Law) was accepted in 2005. For further information please see the Ministry of Environment and Forestry, *The First National Communication on Climate Change*, Republic of Turkey, 2007.

¹⁸ REC Türkiye, LIFE05/TCY/TR164 *Promoting Climate Change Policies in Turkey*, Layman’s Summary, http://www.rec.org.tr/files/iklim/LIFE_FINAL_REPORT/LaymansSummary.pdf.

¹⁹ T.C. Çevre ve Orman Bakanlığı, *İklim Değişikliği ve Yapılan Çalışmalar*, (Çevre ve Orman Bakanlığı, Ankara, Ekim 2008).

²⁰ OECD, *OECD Territorial Reviews*, Istanbul, Turkey, (OECD, Paris,2008), p.13.

natural environment of the overall Marmara region. It is, therefore, an urgent agenda for the governors of Istanbul to deal with urban planning in a sustainable manner.

Even though land-use practices and industrial activities within the city and its close vicinity engender serious environmental problems, Istanbul has great potential to contribute to environmental protection and particularly to emission reduction efforts in Turkey. As the mayor of Istanbul stated during the C40 Summit in New York, there are various initiatives to reduce greenhouse gases from waste management to transportation.²¹ Among these projects, the production of bio-fuels to be used in inter-city transportation and the use of the strong current of the Bosphorus to produce wave energy are worthy of consideration, though the latter seems to be a more expensive option. All in all, these actions seem quite promising for mitigating climate change in Istanbul.

According to the OECD, combining land use planning with environmental and transportation policies, will prevent congestion and encourage a shift to more efficient transportation modes and routes.²² Given that the motorization rate in Turkey is the highest in Istanbul with 25 percent of all cars in the country being registered in this city, new investments such as new transportation networks, creation of new residential and commercial areas need to be planned in line with both mitigation and adaptation strategies.²³ Nevertheless, there are discrepancies in these plans: The Marmaray Project, for instance, is a good example in this respect: The project is to be completed in 2010 and is expected to considerably decrease greenhouse gas emissions arising from road transportation. On the other hand the prospect of constructing a third bridge to connect the European and Asian continents on which Istanbul is built upon, raises doubts about the genuineness of climate change policies. A third bridge may lead to partial destruction of urban forest areas and water reserves in Istanbul and to increased road transportation, which will eventually lead to an increase in greenhouse emissions.

Another problem in Turkey lies in its geographical location as a coastal country in the Mediterranean basin with a high vulnerability to environmental challenges

²¹ C40 is a group of the world's largest cities which committed to deal with global climate change. Istanbul is also a participating city in this group. There will be a climate summit for Mayors in Copenhagen in December 2009 in cooperation with C40 and ICLEI (Local Governments for Sustainability). Please visit <http://www.c40cities.org> for further information.

²² OECD (2008), p. 165.

²³ Ibid., p.161.

More than 30 million Turks are living in the coastal areas.²⁴ Adaptation strategies have so far mainly focused on water scarcity and effective use of water resources, such as developing and encouraging modern irrigation techniques, improving and developing plant species that are drought and salinity resistant. There are also projects on wetland protection, waste water treatment and early warning systems for meteorological hazards.²⁵ Land-use management should also be more effectively and comprehensively included in these efforts. Besides that, all these efforts need to be further integrated into a comprehensive plan. Therefore at the 9th Development Report, the State Planning SPO states the necessity and urgency of preparing a Climate National Action Plan.²⁶

At present, there are three important projects that are run with regard to climate change in Turkey: enhancing the adaptation capacity to climate change, capacity building for climate change and management and development of a national climate change action plan along with the preparations for the 2nd National Communication to the UNFCCC.²⁷ All these projects aim at bringing all attempts for increasing the national capacity to bargain its position for the post- Kyoto period through better mitigation and adaptation policies. Enhancing the adaptation capacity project along with its core objective of developing capacity for managing climate change risks to rural and coastal development in Turkey, also aims at mainstreaming of climate change adaptation into development concerns and increasing the institutional capacity for reducing natural disasters for long term sustainability.

Future Development Paths

Since Turkey has become a party to the UNFCCC, a new era has started: Turkey needs to reconsider its development plans in line with its future role in international climate negotiations. The country also became a party to the Kyoto Protocol on 26 August 2009. Now it is time for Turkey to decide its position within

²⁴ TÜİK, T.C Başbakanlık Türkiye İstatistik Kurumu *Haber Bülteni*, Sayı 14, 26 January 2009

²⁵ T.C.Çevre ve Orman Bakanlığı, (2008).

²⁶ SPO, The Ninth Development Plan, 2007-2013: Competitiveness, Employment, Human Development, Regional Development, Effectiveness in Public Services (SPO,Ankara, 2006), p. 87.

²⁷ MDG-F 1680 Enhancing the Capacity of Turkey to Adapt to the Climate Change (January 2008-December 2010) is a UN Joint Program Project <http://www.undp.org.tr/Gozlem2.aspx?WebSayfaNo=1392> 02.09.2009. Capacity Building for Climate Change Management in Turkey: Developing the capacity of Turkey to participate efficiently in the international climate change negotiations and to join the flexible mechanisms of Kyoto through better experiencing the voluntary carbon markets (January 2009-June 2010) <http://www.undp.org.tr/Gozlem2.aspx?WebSayfaNo=1892> 02.04.2009. Developing Turkey's National Climate Change Action Plan (June 2009-September 2010) funded by the UK's Foreign & Commonwealth Office Strategic Program Fund, under the Low-Carbon, High-Growth Programme.<http://www.undp.org.tr/Gozlem2.aspx?WebSayfaNo=2057> 02.09.2009.

the architecture of the post-Kyoto period. It is a very good development for Turkey that both in the First Communication and the Climate Change Strategy Document, there are references to low carbon emissions. However this is just a beginning for more sustainable growth and development.

Investing in renewable energy sources, increasing the environmental performance of both the industry and the civil society are only a few measures to reach sustainable development for Turkey.²⁸ Producing less and in more environmental friendly ways is not enough to reach a sustainable future. Turkey has to reconsider its definitions of economic growth and development and dare to transition to a low carbon society, which can only be effectively achieved through structural and institutional changes as well as changes in life styles. Consumption trends as well as production directions should be revised with an aim to decreasing waste generation. Disaster risk reduction, on the other hand, should also be resourcefully included into development planning. A more comprehensive framework for these efforts is necessary and can be achieved with a Climate National Action Plan. Implementation of such a plan, however, requires active participation of all stakeholders, that is to say a societal consensus with clear goals and principles.

To date, ad hoc approaches to climate change have only produced futile results both for developed and developing countries. As the Human Development Report states “Climate change is the defining human development issue of our generation”.²⁹ Therefore all countries have to act together on the basis of common but differentiated responsibilities and with their respective capabilities to keep increases in global temperature within a two Celsius threshold above preindustrial levels.³⁰ Otherwise reaching the Millennium Development Goals which are deemed essential for a safer, wealthier and more equable world will become a distant dream.

²⁸ OECD, *Environmental Performance Reviews: TURKEY* (OECD, Paris,2008), p. 25.

²⁹ UNDP, *Human Development Report 2007/2008 Fighting Climate Change: Human Solidarity in a Divided World*, (UNDP, New York, 2007), p. 6.

³⁰ UNDP (2007), p. 7.
