

INTERNATIONAL CONFERENCE:**CLIMATE CHANGE IN THE MEDITERRANEAN AND THE MIDDLE EAST:****CHALLENGES AND SOLUTIONS (18-19 MAY 2018, NICOSIA, CYPRUS)****THE CYPRUS INSTITUTE****TASSOS GIANNITSIS, Professor Emeritus of Economics, former Minister:****Climate Change: Economic and Social Governance challenges in Eastern Mediterranean**

Economic and social governance of climate change encompasses innumerable aspects, the combined impact of which has profound, even if unknown impacts on the fundamentals of our societies¹. The question becomes more complicated if we add to the problem the risks related to other factors (such as energy, ageing, increasing world population, availability of resources, changing balances of power and diverging value systems) as well as globalization, and their potential impact on domestic and global politics, societies and institutions. Here, again, the question is about the potential role of the State in confronting these new threats. In terms of climate change, many studies have found that better governance and political institutions are associated with lower CO₂ emissions². Hence, this issue ultimately becomes about the components of good governance.

In this presentation, I will focus on four issues:

- The complexity of adopting new governance principles which are in sharp contradiction to established governance practices and embedded attitudes,
- Inequality and asymmetrical effects of climate change,
- The central role of technology-push policies and knowledge-related activities,
- Some practical proposals regarding the role of the CyI regarding the design of growth policies and climate change governance in Cyprus.

1. A fundamental change of Governance principles

¹ For an extensive overview on the issue see Fröhlich and Knieling (2013)

² See Dutt (2009), and references therein.

Climate Change Governance is confronted with five unprecedented parameters in comparison to any other known governance challenge:

- For the first time, we know that in the foreseeable future we will be faced with a global problem of unique dimensions³. Extraordinary conditions require extraordinary and concerted intellectual and practical adaptation skills, as well as the acknowledgement that in the case of climate change the term ‘usual’ in the ‘business as usual’ concept signifies governance under not very usual conditions.
- The impact of climate change goes far beyond any standard economic or other parameter. Climate change policies extend across several policy and sectoral planning areas (like flood, displacements, agriculture, transport, health) and raise severe economic, social, cultural, political or even philosophical and ethical questions. At the same time, problems and targets exceed the existing planning and decision-making periods⁴,
- The estimates of economic, political, social and geopolitical impacts contain strong elements of uncertainty, risk as well as dismal certainties⁵, which, at least partly, can be a result of human (and political) inertia. What also we do know with certainty is that the disruptions that may arise will be unprecedented, and this 'unprecedented' dimension may not be felt until we are well into the future (and have even less time to react).
- Many studies acknowledge that the impact of climate change and the distribution of policy costs and benefits across space, sectoral areas of activity, income strata, stakeholders and time will be significantly uneven.⁶
- A related important set of questions asks whether and to what extent our societies should factor in the ethical dimensions of the problem, in the sense of taking up a responsibility for mitigating and adapting to climate change and

³ Among many others, see Meadowcroft (2009).

⁴ Boeckmann and Zeeb (2016), Fröhlich and Knieling (2013), Tol (2018), Robinson (2015).

⁵ Tol (2018), Goulder and Pizer (2006).

⁶ Goulder and Pizer (2006), Fröhlich and Knieling (2013).

showing precautions for future generations, other societies, biodiversity and, in general, the long-term conditions on this planet⁷.

The global dimension and the parallel exposure of many countries to multiple risks as a result of climate change allow for a *first conclusion*: the problem of climate change is already, and will for a long time be, the greatest power game ever, between (as well as within) strong and weak economies.

A *second conclusion* is that an efficient Climate Change Governance needs to integrate a range of new principles:

- Global and bold policy approach, accompanied by collective commitments,
- Cross-policy planning,
- Proactive decisions, despite severe uncertainties and risks,
- Timely and flexible policies, including policies combating disastrous asymmetrical effects,
- Ethical.

Unfortunately, such principles are at odds with actual governance practices and patterns, shaping between- and within-country relations. I would like to make three points on this:

- *First*, the long timescale of climate change, the integration of inter-generational thinking and a long-term dimension into policy making, extending to twenty, fifty or more years into the future, challenges prevailing political and ideological stereotypes⁸. Such challenges require a fundamental change for societies in which policy-making is marked by short-termism and the decision making process is determined by an electoral cycle of few years.

Second, climate change management requires general and not partial equilibrium approaches. If significant areas are left outside the policy agenda, governance efficiency and crucial and societal goals can be jeopardized. In essence, mainstreaming climate change into policy means adaptation of social values and attitudes, in the way of designing and implementing an ambitious

⁷ Page (1999).

⁸ Fröhlich and Knieling (2013).

plan for reforming and transforming the functioning of institutions, the economy, the education system or the patterns of consumption, production and investment. It also means new types of decisions on practical matters, such as on unplanned and illegal building, waste, water, agricultural chemicals and on the subsoil. In essence, the climate change dimension is not just another policy to be added alongside other ones (like, education, industrial, spatial planning or energy policy); It is an across-the-board dimension, which by its very nature is absolutely necessary to be included in numerous more specific policies.

- *Third*, as a logical consequence of the above, the dimension of climate change requires challenging many of today's established realities. Such multiple confrontations typically cause significant disruptions within societies, but this one will also be of a character different than any we have seen so far. The time and location in which decisions on costly adaptation changes have to be made will not be the same as the time and space in which the results of these decisions will be felt.

2. Inequality

Several analyses reach the same conclusion: the impact of climate change will be less adverse in the more advanced countries and more so in the poorer ones⁹. This would mean that the decline in inequalities observed across countries since the mid-1990s is likely to give its place to an increase, while the within-country inequalities which have also risen considerably in the last two decades, would worsen.

More than a question of social justice, the observed increase of within-country inequalities is also considered as a significant destabilizing factor, affecting both, the macro-economy and the political balances and exerting very visible negative effects on growth, investment, income, as well as social and political stability. Even if some political forces and societies could be tempted to remain inactive, unconcerned or

⁹ Meadowcroft (2009), Jones, Olken and Dell (2009), Tol (2018), Setija (2017), Boeckmann and Zeeb (2016).

even hostile to adaptation policies, internal or between-country inequalities are still expected to increase.

In fact, the vast array of climate change implications will have significant influence on issues related to inequality, not only in economic, but foremost in social, political, humanitarian and other terms. However, it is important to note that the degree of inequality is not exogenously determined. Instead, it can be mitigated or aggravated by national choices and policies. The observed differences in the level, change and forms of inequality in industrialized countries show how policy decisions can succeed or fail in containing unevenness and enhancing more inclusive forms of development. Therefore, the message on the connection between climate change and inequality is clear: governance and different political and social choices (and respective social, tax and redistributive policies) can either mitigate or exacerbate the internal inequalities and the disruptive impact of climate change policies.

3. The central role of technology-push policies and capabilities

Climate change will have significant implications on technological change and, hence, on several economic and social relations¹⁰. The history of technology shows that complex new challenges lead to technological changes and innovations able to solve problems and mitigate potential economic and societal risks. Climate change is expected to induce a competitive race in technological change, that will not only involve the development and use of new types of energy technologies. It will be one that sparks increased scientific and applied research leading to new products and services, new knowledge trajectories, and extensive changes in production processes and cost-saving techniques across many sectoral activities. This is already evident in many examples, such as the shift to shale gas and shale oil, clean technologies, new building materials or the emergence of robotics.

In fact, it is reasonable to expect the beginning of a new era of high technological mobility, directly or indirectly transforming broader parts of the productive and social balances. Firms and countries on any level of the technological pyramid will be constantly faced with new risks and windows of opportunity. For weaker economies, the management of the implications of such technological mobility will become increasingly important and difficult. However, what is crucial for them is whether and

¹⁰ Goulder and Pizer (2006), Meadowcroft (2009).

to which extent they will be able to participate in the new division of labour as producers and not only as importers and users of climate-friendly technologies and goods produced elsewhere.

The point at issue here is much more than a technological one. It is of a more complex nature, linking governance, institutional changes, social values and attitudes, coordination of research and technology policy, multiple transformations regarding the productive processes as well as the management of the social and political impact in the medium and long term. Finally, an important related question is not only how to reduce the CO₂ emissions per unit of output, but how to reduce the total volume of these emissions.

4. Peripheral Governance and the role the Cyprus Institute could play

In the context of such deep uncertainties and multiple challenges, it is very important to develop capabilities, networks, institutions, attitudes and initiatives bringing a society nearer to climate friendly paths. The establishment of regional bodies entrusted with specific tasks would offer several advantages. Cyprus is located in an unstable geopolitical environment characterised by many long-term political and social uncertainties, tensions and even armed confrontations. As a small island economy, Cyprus has to operate within a narrow range of discretion concerning economic growth and adaptation. Consequently, its competitiveness, growth and standard of living depend not so much on its capability to generate innovation or technological change on a large scale, as on its ability to specialise selectively in niche sectors, exploit in a timely manner new available technologies, and react decisively and before other followers. What is equally important, is to monitor and follow the continuous transformations and changes that are taking place worldwide or regionally (especially regarding activities in which Cyprus has or could build competitive advantages) and identify in a timely and effective manner the right challenges and policy options.

Geography and, to some extent, politics, offer Cyprus and other countries in the region the opportunity for broader regional synergies and cooperation regarding common problems and/or future challenges. The goal to enhance supportive mechanisms for a more active policy regarding options and interventions could justify

the establishment of a new Center or Institute as part of the Cyprus Institute, focusing on Economics, Technology and Climate Change. The scope and objectives of such a Unit could be designed along the following two broad lines:

- a) To combine economic approach and technology or innovation aspects, explore their interrelation to growth and transformation of the local or regional economy, and identify potential opportunities for developing new technological capabilities or appropriate policy management.
- b) To monitor technology-related developments relevant for addressing major challenges, in fields such as climate change, water management, soil erosion, energy saving or energy exploitation.

5. Closing comments and a related political question

The recent crisis has shown us how economic imbalances could spread out, upset significant and fragile social balances and, subsequently destabilize the political system of crisis-hit countries. It would be a historical curiosum if changes of the magnitude expected would occur without causing significant political tensions, conflicts or troubles and internal imbalances in the affected countries. Under such conditions, the risk is high that a global public good like the governance of climate change could be handled as a power game issue associated with cynical attitudes, especially by actors who may have contributed the most to the problem. In fact, rather than being a hypothetical point, this risk is very close to reality. In such a case, instead of governance efficiency and mitigation or adaptation policies, humankind could witness a scenario whereby the history of climate change governance would turn out to be a history of cynicism. Some of our countries have the privilege to be part of an international entity –I mean the E.U.- that has been leading the green transition. Nevertheless, I don't know whether one could be particular optimistic about the legacy our era will leave in history. The stakes are high, and the signs are mixed about what can and will be done to address this potentially existential issue for our planet. Still, one must persist, even if the odds are not in one's favor or the obstacles appear too great. Hence, I would like to close with a quote from Samuel Beckett: "Try again, fail again, fail better". Our world could be happier.

References

- Boeckmann M., Zeeb H. (2016), Justice and Equity Implications of Climate Change Adaptation: A Theoretical Evaluation Framework, in *Healthcare*, 65 (4), 1-14.
- Dutt K. (2009), Governance, institutions and the environment-income relationship: a cross-country study, in *Environment, Development and Sustainability*, 11 (4), 705-723.
- Fröhlich J., Knieling J. (2013), Conceptualising Climate Change Governance, in J.Knieling, W. Leal Filho (eds.), *Climate Change Governance*, (Springer Verlag, Berlin, Heidelberg), 9-24.
- Goulder L.H., Pizer W.A. (2006), *The Economics of Climate Change* (NBER, Working Paper 11923).
- Jones B., Olken B., Dell M. (2009), Does climate change affect economic growth?, in *VOX* (June 6, 2009).
- Lavelle M. (2017), Climate Policies Could Boost Economic Growth by 5%, OECD Says, in *Inside Climate News*.
- Meadowcroft, J. (2009), *Climate Change Governance*, (The World Bank, Policy Research Working Paper 4941).
- Page E. (1999), Intergenerational Justice and Climate Change, in *Political Studies*, XLVII, 53-66.
- Robinson M. (2015), Q&A with Mary Robinson: What is climate justice? (Germana Canzi, Road to Paris, 27 July)
- Setija K. (2017), 3 Questions: How Philosophy can address the problem of climate change, in *MIT News* (Feb.8),
- Tol R. J. (2018), The Economic Impacts of Climate Change, *The Review of Environmental Economics and Policy*, 4-23.