

A POSTULATE FOR ACCELERATED IMPLEMENTATION OF SUSTAINABLE DEVELOPMENT GOALS AND PRINCIPLES

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ABSTRACT: The last 30-year period has been increasingly important for sustainable development, as is evidenced by the UN's announcement of 17 Sustainable Development Goals to be achieved by 2030. However, many megatrends continue to progress in the direction opposite to that meeting the needs of sustainable development. For the Earth and human civilisation to be protected, it is necessary for a new approach to be developed – a new order that might be termed the civilization/economics of enough, or of moderation. However, convincing societies, including that of Poland, in regard to the benefits of addressing the challenges sustainable development poses is not an easy task; even though a redirecting of the economy and of society along new paths will bring measurable benefits capable of compensating for the costs of transformation.

KEY WORDS: Circular economy, civilisation/economy of enough or of moderation, consumption, the biosphere, megatrends, Poland, resources, social justice, sustainable development.

THE WORLD

There are two possible ways of assessing the 30-year period that has gone by since the famous Report came out. On the one hand, there is ever-greater interest in the issue

of sustainable development, as the UN's 2014 announcement of its 17 Sustainable Development Goals to be achieved by the international community by 2030 makes clear. On the other hand, it is not possible to remain unperturbed by such ongoing trends and circumstances as:

- the steady exhaustion of the Earth's natural resources (especially the non-renewable ones), including the loss of biodiversity and impoverishment of ecosystem services;
- ever-expanding, evidently unsustainable consumption (especially material consumption) driven by a linear economy that entails taking from the environment, using and throwing away;
- the ongoing presence of a great many pollutants harmful to the environment, the economy and nature, with these capable of leading to breakdowns in the natural systems maintaining life on Earth (as in the case of anthropogenic climate change);
- the size of the world's poverty-afflicted areas, accompanied by ongoing concentration of wealth in a very small number of hands;
- the limited say given to local communities in relation to decisions of key importance to them; and the growing scale of corruption;
- the growing refugee problem, be this a result of war and conflict, or of existential conditions deteriorating through climate change, lack of access to water, a lack of food or energy poverty.

According to the World Wildlife Fund (WWF), the period 1970–2012 brought a global 58% decline in populations of fish, birds, amphibians, reptiles and mammals. And, while the 30 years have seen extreme poverty limited markedly, the World Bank maintains that 1.2 billion of the world's people (or more than 17% of the entire population) must still live on less than \$1.25 a day. In turn, according to *Oxfam International*, wealth disparities are greater than ever before, with the poorest half of the world's population having the same financial assets at their disposal as our planet's EIGHT wealthiest people. The International Energy Agency reports that 1.2 billion continue to lack access to electricity, while all of us taken together consume resources at a level 1.6 times as high as the Earth has the biological potential to regenerate. The limit of renewability was in fact passed 40 years ago now. And, while the global use of material resources has increased tenfold since 1900, the human population in that period has been subject to a 4.2-fold increase.

Megatrend analysis allows us to know the direction in which the world is heading, and the challenges that lie ahead of us all. In fact, the European Environment Agency identified 11 such megatrends, and – if we take these account, along with the findings of a great many other studies – we can outline those challenges as follows:

- **A trend for ever-greater disparities to characterise the world population.** The UN anticipates 9.7 billion people in the world by 2050, and over 11 billion by 2100. This denotes a larger workforce at the disposal of the market and also – crucially – a greater number of consumers. Divergent trends are to be observed at present. A growing, younger population is present in developing countries, while the world as a whole enjoys growth in the wealthier middle class, and the developed

countries have ageing societies. In these circumstances, migratory movements take place, with a mixture of threats and benefits generated for both the developed and developing world.

- **A trend towards ever-greater urbanisation.** More than half of the world's people are already city-dwelling, and by 2050 this share will reach 2/3. Where investment is steered appropriately, ongoing urbanisation can stimulate innovative solutions to social and environmental problems, though there is also a potential for increased resource use and pollution, as well as a further worsening of poverty as slums go on expanding.
- **A changing burden of disease and pandemic risk.** Around 25% of diseases and deaths can already be attributed to environmental factors, and by 2050 it is anticipated that air pollution will have become the main cause of premature mortality. The World Economic Forum (WEF) estimates that the treatment of chronic disease will cost \$47bn in the 2010–2030 period.
- **Ever-more-rapid technological change.** Modern technologies are changing the world radically, and this is most especially true of nano- and biotechnology, as well as Information and Communication Technologies (ICT). While these may all provide for a reduced anthropogenic influence on the environment, and for increased resource security, they do pose threats, or are at best a source of uncertainty. Further changes in ways of working will take place, but a true revolution may ensue around 2020, when half of all workers on the labour market will be of a generation born and growing up with digital technology. In turn, the next 20 years could see automation in the developed economies put paid to almost half of all the professions recognised at present.
- **A more and more multipolar world. Steady economic growth?** Most forecasts for the upcoming decades foresee continuing economic expansion worldwide, with intensified consumption and resource use in Asia and Latin America in particular. A marked shift in the economic hierarchy is taking place at present, with Asian countries coming to the fore, and so influencing global and trade interdependence greatly. By 2030, Asia will be home to 66% of the world's middle-class people, responsible for 59% of that class's consumption. As of 2009, the comparative figures were 28 and 23%.
- **Growing global competition for resources and increasing pressure on ecosystems.** By 2030, the world's use of material resources may have doubled, thanks to further development of industry and changing consumption patterns. The scale of the increase in demand may result in limited access to many critical resources, while also doing major further harm to the environment. The uneven geographical distribution of resources around the world may also provoke price-hikes, while impacting on standards of living and even provoking geopolitical conflict. Urbanisation and continuing population growth will inevitably denote greater demand for raw materials and resources in general. Forecasts indicate that, by 2030, the global demand for energy and food will be 50% greater than now, the demand for water 40% greater.

Half of the world's population will have difficulties with accessing water by then, and such problems may limit cereal harvests by as much as 30%.

- **Ever-more-serious effects of climate change.** If emissions of greenhouse gases continue to rise as they have done in recent decades, by the end of the 21st century (in the 2081–2100 period) the mean surface temperature on Earth may be 3.3–5.5°C higher than it was in the 1880–1910 reference period. Anticipated ongoing climate change will have serious impacts on ecosystems and societies (*i.a.* as regards access to food, the frequency of occurrence of droughts and other extreme weather events), as well as on economies.
- **Growing pollution of the environment.** Pollution originates from three main areas of human activity: the combustion of fossil fuels (above all in the power industry, industry in general and transport), the use of artificial fertilisers and pesticides in farming, and the growing use of chemicals. Increased emissions may see certain planet-wide thresholds exceeded, with biodiversity then lost even more than hitherto, while nitrogen cycling is impaired and further climate change ensues.

A prerequisite if such unfavourable megatrends are to be counteracted is that there be a shaping of the kind of vision for the development of civilisation in the second half of the 21st century that would denote a main emphasis on recognition of the finite nature of the biosphere (in relation to both non-renewable and renewable resources); of the limited capacity of the environment (denoting a need to curb pollutant discharges); and of the need to safeguard ecosystem services. If Earth and human civilisation are to be protected, a new approach to economic development has to be devised. The new order would need to be termed the civilisation or economy of moderation, and it would above all manifest itself in a stable level of resource-use, with this having its impact on the level of consumption. In other words, as *Enough is Enough...* (2010) made clear, the focus would be on 6 key elements, *i.e.*:

- a sustainable approach, meaning an economy of stabilised size within limits designated by accessible resources and the capacity of the environment to deal with discharged pollutants;
- the introduction of a fair division of assets, such that everybody is afforded living conditions allowing them to live in dignity;
- the development of a socially and environmentally efficient allocation of means for different facets of activity, to the extent that the market economy is applied appropriately, with account therefore taken of its pluses and imperfections (especially externalities);
- the promotion of a participatory approach to decisionmaking that takes account of engagement by both enterprises and civil society;
- the promotion and propagation among present and future generations of a high quality of life based on clearly-defined values;
- the provisioning of lifelong learning for all citizens.

A key element for the civilisation founded upon moderation is a departure from the linear economy in favour of a closed cycle that allows for the added value of products

to be retained for as long as possible, with wastes eliminated. The system provides for the renewed use of goods many times in a productive manner, with further value generated in this way. This requires change in every link of the value chain. Closed cycling within a circular economy framework is an approach whose planning stage envisages products, components and materials maintained in as utilisable and high-value a state as possible throughout their life cycle. Necessary modifications proceed one after the other: from the design phase to new business and market models; from new ways of turning wastes into resources as far as new behaviours on the part of consumers. A decisive systemic change is thus denoted, as well as the ushering-in of innovative solutions, not merely regarding technologies, but also in management, the organisation of society, methods of financing and policy.

In the kind of economy being described here, a clear distinction is drawn between consumption and the utilisation of resources. This reflects a change lying in the fact that a producer or seller would retain rights of ownership over a product wherever possible. This party thus operates as a service provider to a client (the service being the satisfaction obtained as the product is used), and there is no one-off “consumption” event taking place. This fundamental change has key implications for effective and efficient systems by which clients take delivery of products, as well as for the spread of product and business models of behaviour and practice. Such a system stimulates the production of more and more durable goods that are easy to disassemble and repair or renovate. At the same time, where this is justified, a change takes place from the purchase of a product to the obtainment of a service that actually provides the same satisfaction as would actual possession. According to pioneer of the circular economy Walter Stahel, the linear model in place caused a return from services to the purchased product, with wastefulness being the result. Today, the circular economy has become synonymous with good management of resources and intelligent management.

The high quality of life associated with the civilisation posited upon moderation lies in the access to food, clean water, sanitary installations and health services that it affords, though first and foremost in the reduced mortality rates achievable among children in particular, as well as longevity in general and healthcare programmes targeted at women’s reproductive health. This all plays a key role in resolving demographic problems and the attendant migrant crisis. Bearing in mind that most of the world’s population will be resident in cities, greater cohesion, efficiency and environmental sustainability will all be achieved, with the wellbeing of a still-rising population safeguarded. Smart planning will also ensure the efficient use of urban space.

The ever-more-limited possibilities of governments in the face of the more and more serious long-term global challenges posed to society requires that additional decisionmaking pathways be brought in, with greater engagement on the part of both businesses and civil society. While these changes are all essential, they bring with them certain fears as regards coordination, efficiency and responsibility.

POLAND

Over the last 25+ years, there have been fundamental changes in the approach taken to the environment and sustainable development in Poland. A clear mark has been made by the systemic transformation achieved in the late 1980s and early '90s, as well as the country's accession to the European Union on May 1st 2004. Ironically perhaps, it was first and foremost the abrupt introduction of a market economy and the (consequent) bankruptcy or curbed output of many industrial plants (including burdensome ones) that had the first impact in improving the ways resources and energy were used in Poland, as well as in reducing emissions of pollutants. In both cases, the overall impact on the environment was beneficial, even if there was a simultaneous emergence of serious social problems hitherto unknown (or assuming a different form) – notably high unemployment and a descent into abject poverty for some. In particular, an expansion of energy poverty was noted, with this problem coming to affect at least 10% of society in this country.

The development of a democratic system made it possible for a modern civil society to begin to develop in Poland at last. Nevertheless, social capital remains only weakly-developed here to this day, with the country taking one of the last places in Europe when it comes to mutual trust within society, as well as trust in public institutions. Likewise, the statistics for engagement at election time and the taking of joint decisions in the common good are far from favourable.

At the same time, it is worth recalling how, by its own efforts (if assisted by EU Funds), Poland has made considerable progress with outfitting in environmental protection infrastructure of both a communal and industrial nature. This has also had its more permanent and genuine effect in improving the state of the country's environment. Many steps have been taken to bring greater and greater areas under protection, most especially within the broader *Natura 2000* framework. Of course, the progress remains inadequate in some sense, not least because many examples of previous neglect have not yet proved rectifiable. Thus:

- a rich and considerable natural capital (especially in the form of biodiversity) continues to depreciate;
- considerable efforts notwithstanding, the country continues to lag behind where environmental infrastructure is concerned;
- environmental improvement is ongoing, if slow, but this may not be said of urbanised areas, where there has been a marked worsening of air quality due to smog generated to a marked degree, not by industry, but by the so-called short-stack emissions, with consequences in the form of perhaps 45 000 extra premature deaths;
- the efficiency of the use of natural resources is increasing, though productivity remains low, and Poland lags behind markedly in waste management.

The above do not represent the limits of the problems, given the emergence of new threats, and on a scale not encountered hitherto. This is in particular true of negative impacts of road transport, in a period that has seen public road and rail transport decline in

significance. More generally, the altered opportunities for consumption (especially material) have ensured steady regrowth in the size of Poland's ecological footprint, following a decline immediately after the transformation. This is reflected in waste management, while the development of road infrastructure and ongoing urban development (often taking the form of urban sprawl) has its impact on naturally-valuable areas, which are contracting. Also worth stressing is the threat posed by chemicals, as well as limited scrutiny over the pressures that SMEs impose on the environment and human health.

Elements of the green economy are being put in place too slowly, particularly when it comes to renewables, resource and power-generation efficiency, organic farming and environment-friendly food processing, attempts to arrest the decline of public transport, and the development of ecotourism. The rapid boosting of environmental innovation also remains a challenge.

A change of direction in the development of Poland requires development and implementation of actions that – in accordance with Art. 5 of the Republic's Constitution – would allow for sustainable development on the basis of equal treatment in the eyes of the law of economic, social and natural capital. This would denote:

- in the social sphere:
 - a decisive strengthening of social capital, and trust between people, as a driving force behind changes towards a society founded upon sustainable development;
 - the basing of strategies for the country's development around the quality of life of today's generations, but also those that will follow them, in line with equal treatment for all;
 - broad application of the principles of subsidiarity and public participation when it comes to the resolving of development problems at all levels (from the local up to the international);
 - systematic engagement in the education of society vis-à-vis sustainable development;
- in the economic sphere:
 - a transfer away from the inefficient linear economy to a circular economy based around restraint and moderation;
 - the generation of sustainable consumption that stresses the importance of what is non-material;
 - efforts to make resources more productive and to raise the efficiency of ways in which they are utilised;
 - introduction of new-generation innovation that promotes smart solutions;
 - full economic accounting as regards costs to society and the value of ecosystem services;
- in the natural sphere:
 - planning in respect of the rate at which resources (especially non-renewable) are used, as a manifestation of inter-generational justice;
 - the designation and heeding of pollutant limits;

- a decisive strengthening of the country’s natural infrastructure, enhanced biodiversity conservation and care taken to preserve ecosystem functioning (and hence ecosystem service provisioning),
- achievement of spatial order.

It is no easy task to convince either Poland’s elites, or its public, of the benefits that will ultimately flow if the challenge of sustainable development is taken up. This reflects the specifics of the economic model that the country has taken up, which is based on ever-more intensive exploitation of resources (be these of labour or capital or energy, or directly from nature), as well as the willingness to build a society based on over-consumption at the expense of a depreciation in the value of environmental capital. In these circumstances, every effort to achieve a new “greener” aspect to Poland’s transformation has met with resistance. Nevertheless, a shifting of the economy and society on to a new track of the above kind would bring measurable benefit to compensate for the transformation costs. For it denotes the aware shaping of contemporary challenges in society, with a higher quality of life put in place – including as better health for the citizens of today and tomorrow, plus the installing of an innovative and smart economy that operates within the limits available resources can set, with levels of discharge of pollutants that the natural systems maintaining life on Earth can cope with, and hence with ecosystems able to operate effectively in providing services.

REFERENCE

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