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The Principle of Sustainability and Its Implementation in Germany

The following elaborations focus on the questions of normative contents of sustainability. They address seven dimensions that, from my point of view, are indispensible for a sound understanding of the term sustainability:
1. Ecological / forest management, 2. Political, 3. Theoretically Equal, 4. Socio-economic, 5.Democratic, 6.Cultural, 7.Theological

My demonstration also follows a critical intention: from my view, there are presently worldwide in all dimensions fundamental misunderstandings. These are partly to be blamed for the fact that the discourse about the environment and development of the past years has ended up in a dead end discrediting the term sustainability as a seemingly content-empty "fuzzy notion" and non-committal "all-purpose glue". The objective of my talk is a contribution for "saving the concept" by drawing a dividing line from its growing superficiality in its undifferentiated use.

Additionally, I have a central theme for the continuing development of Catholic social ethics: up to now the environmental question has not been systematically anchored in nor sufficiently been linked with the social question. Therefore Christian appeals to our responsibility for the creation are politically mostly ineffective. To overcome this deficit placing sustainability as a fourth social principle in the teaching of Catholic social ethics (together with personality, solidarity and subsidiary) would be decisive. An enculturation of the Gospel in economic and social structures as well as globalization of solidarity cannot be achieved today without sustainability. For this there is need for a simultaneous critical further development of the principle which the Christian faith could contribute to substantially.

1. Ecological: Forest Management Impetus for the Common Weal

The principle of regulating sustainability, which was first formulated by the Saxon senior miner Hans Carl von Carlowitz, is a product of the early Age of Enlightenment. Its provenance is to be found in the context of cameralism from which he adopted the moulding orientation toward the state and common weal.

Carlowitz uses "sustainable" as an opposite term to "neglectful". Therefore, sustainability is not a passive principle of limiting but rather aims at an optimal planting and cultivating trees suitable for the respective soil and demand in robust cultures. It's about actively and innovatively shaping the future not just about the limits of what is allowed respectively forbidden. Deeply impressed by the natural philosophy of Spinoza, Carlowitz harbours the notion of "natura

naturans", i.e. nature as a creative ever-evolving power. Primarily, it is not about preserving what exists but rather making room for nature's vital forces.

Generalizing the principle of sustainability as a rule for managing resources as a whole, one might say: the right to property of the resources of one generation is never unlimited, but bears the character of a *usus fructus,* a right to acquire yields as long as the potential of generating yields is preserved. As Man has not created nature, he cannot be its owner in an emphatic sense. Thus ran the words of the liberal philosopher John Locke in the 17th century. This figure of thought is well known today especially so through the monotheistic religions with their hint at God being the true owner of the creation. Consequently, sustainability necessitates a critical reflection on the notion 'property'.

Right from the beginning, sustainability has been more than a rule for forest management of preservation. However, this putting a rule for forest management of preservation in a nutshell is very memorable and suitable for a first approach to an understanding of the concept. "Not to fell more trees than will grow anew" or in more general terms: not to use more resources than will form anew in the same space of time." There are many fields that provide graphic analogies for this. For example in financial management: living off the interests and not the capital" is a yardstick of financial sustainability which is being postulated more and more in times of the debt crisis (for example in the "golden rules for stabilizing the budget" (Federal Government 2008).

The core of sustainability entails the planning, anticipating and considerate embedding of the economy in the ecological metabolic cycle and rhythms of time.

2. Political: Sustainability as Cross-Section Politics

At the UN-Conference on the Environment and Development (UNCED) in Rio de Janeiro 1992, the global community agreed on the central theme of sustainable development defining it as a "Programme of Actions for the 21st Century" (Agenda21) in far-reaching hope and self-obligation. In the context of the UN, there was a new design of the concept of sustainability. Of an innovative nature would be above all the linking of the themes environment and development as well as their integration in all fields of politics. Thus "sustainable development" became the all-encompassing guiding principle of global partnership.

The systematic accentuation of the multi-layered dependences of ecological, social and economic factors forms the core of this approach on sustainability. The commonly known labelling of a "Three Pillars Concept" is misleading as no equal footing exists between the three approaches but rather their integration

and interconnection. In their expert's opinion of 1994, the board of experts for environmental issues call this total interconnectedness "Retinität" (German technical term) – resiliency- the conceptual environment-ethical basic idea of sustainability thus establishing a reference to the problems of controlling interconnected complex systems. In the practice of planning there is often talk of cross-section politics as a counterpart.

The Three Pillars Concept simultaneously harbours a deep truth and a decisive danger: It is correct that from an ethical-political view the decisive strategic point of sustainability rests in broadening the ecological perspective by social and economic approaches. It is only this that liberates the environmental policy from its isolation and helps the conduct of aftercare repairs to turn into a purposeful programme which means its integration into socio-economic concepts of development. The defensive protection of nature reserves is too little as a conceptual basis of sustainability.

However, it is a misunderstanding if the Three Pillars Concept is used to claim that ecology, economy and social affairs are each of the same value. These are completely different areas which cannot be compared on a one to one basis. One compares apples with pears and comes up with deliberate statements. Someone who defines sustainability as a sum of social, ecological and economic objectives falls victim to the fallacy of maximum. As there is hardly anything that cannot be subsumed under these three notions, the range of this concept becomes almost infinite – and, consequently, according to the law of logic its content nearly nought, as it does not confine nor define anything, its content utterly void.

Should the term sustainability make sense at all, it should not be defined as a sum but as the interdependence of ecological, social and economic factors. It is not about the totality of eco-social and economic problems but a systemic way of thinking in view of "nationalisation of environmental problems".

This analysis brings with it considerable consequences for the conceptual direction of processes of sustainability. Someone who regards ecological, social and economic aspects as a sum ends up in the wake of lacking contours and, in the end, wilful broadening of the term. These problems can also be observed in German discourses on sustainability

3. Theoretical Equity: Inter-Generational and Global Responsibility

In the logic of its argumentation the sustainability concept of Rio does not set off in specifically ecological terms. Instead it is based on a broadening of the understanding of equity in worldwide and inter-generational dimensions (global and inter-generational equity). This is a logical consequence of globalisation

whose unlimiting of space and time in economic and social interactions necessitates a respective extension of ethics.

The scientific debate starts off with the question if “equity” is to be interpreted as “equality” in egalitarian terms. If it is favoured (as for example in the study “Germany, Ready for the Future” prepared by the Wuppertal Institute in 1996), two ethical basic postulates are yielded: 1.equal life chances for future generations 2. equal rights to globally accessible resources. In view of gross differences in respect to geographical, cultural, historical conditions people live in such postulates of equality are highly problematic. Soloterdijk talks of “nature socialism” of platitudinous postulates of equality.

As the future cannot be calculated and the needs and competences of future people are not completely known, freedom should be given a high priority. Thus the idea of an equal distribution of the resources between the generations is of no great help in many areas. The target should rather be to leave to posterity a world offering enough free space and means to make their own decisions.

Today the central reliability test for inter-generational responsibility is CO^2 equity. On the basis of a human rights approach fighting poverty must be integrated systematically and dealt with ethically with priority. For the leading developed nations CO^2 equity means that they must reduce CO^2 output for at least 80% to 2050. For Germany this means a reduction from 10 to 2 tonnes per person and year.

Viewed from a scientific standpoint, climate equity needs above all an improvement of the basis of information and calculation for the CO^2 cycles (e.g. including aircraft fuels as well as the lowering function of woods and soils) as well as valid analyses of the conditions for the functioning of markets for the emission trade on which rest many hopes for a change of direction for a sustainable energy supply. For a fact, in the consultations in Brussels Germany has contributed that the effectiveness of the European trade of certificates was destroyed because too many cheap certificates were issued and still are.

4. Socio-Economic: Operationalizing the Principle of Sustainability

Sustainability manifests itself in the endeavour to preserve the “natural capital stock”. The conceptual discussion on the theorem of the natural capital stock aligns to the two terms “strong sustainability” and “weak sustainability” with the latter allowing substitutions of natural stock by ecological, social or economic gain of value whereas the former interpretation does not. The postulate of “strong sustainability”, which has also been joined by the Experts’ Council for Environmental Issues of the Federal Government, is of a decisive importance to the extent that it opposes the misunderstanding of the Three Pillars Concept

prevalent for so long. The seemingly equal standing of the three dimensions inevitably leads to an undermining of the ecological postulate. According to the concept of strong sustainability, the preservation of the natural capital stock can only be regarded in very constrained terms as something that can be compensated by economic gain of value. Experiences with the financial crisis ask for caution in a more pressing way as these have shown how questionable standards of measurement of economic wealth and progress are in times of virtual moneymaking.

However, there is a methodical problem. In the model of strong sustainability the term "resource" is assumed as a pre-social fact. But something can be defined as a resource only once there is a perspective of its use. If, for example, hydrogen engines have been invented, hydrogen turns into a resource. A society who would not know what to do with oil, oil would not be a resource. On the basis of its reference to use the term is a dependent variable of technological and social innovations. Through inventions of new and more efficient possibilities of use resources are increased. If this is denied, sustainability degenerates into a passive principle of constraint.

Sustainability is not "strong" when assuming a naturalistic notion of resource but when not losing sight of the complex interdependence amongst the socio-economic and ecological systems that each follow their own logic. Against the backdrop of globally increasing crises of climate change, financial system, unemployment, hunger, lack of fresh water specific to certain regions, loss of biodiversity, extinction of fish stocks, soil erosion and scarcity of resources – to name a few aspects of the multiple development crisis of the early 21st century – operationalizing the concept of sustainability should focus more strongly on resilience in the future, the robust dealing with processes of change. The commonly known win-win models of environmental protection and economic gain often are too optimistic and occasionally lead into the wrong direction. I do not deem *fracking* in Poland, which is planned at a large scale, as in line with the postulate of the preservation of nature capital, above all because of the incalculable risks to the groundwater body.

5. Democratic: Pluralism, Participation and Democratic Innovation

The constructive dynamics of a societal adaptation to the conditions of nature essentially rest on social processes of innovation as well as on a cultural change of values which from the beginning integrates the objectives of sustainability into scientific, technological and economic development. It is possible only within the framework of a concept which acknowledges different preferences, world views and competences in a pluralistic society. Apparently, because of this openness, the model of sustainability cannot be an unambiguously defined objective. It is rather a system of objectives with part components that cannot be

deduced to each other which offers an over-all perspective orientated to the future to allow negotiating in different situations ethically founded and balanced categorizing. It embodies a pluralistic role model which can be put in concrete terms only by diverse societal processes of seeking in economy, science and culture.

The openness of the role model of sustainability demands a stronger participatory shaping of public life in civil society. This is the democratic central idea of Agenda 21. "Participatory democracy" is not only a means but simultaneously fundamental content of the concept sustainable development. The active shaping of the respective living space cannot be ordered from above, but must grow slowly. Through appreciation and participatory shaping a consciousness of responsibility thrives. Thus participation is an essential element of the ethical principle of sustainability.

A topical test of endurance and chance hereto is the change of energy agreed upon by the German Federal Government in 2011 which cannot succeed without the active participation of the consumers by new patterns of consumption and mobility and which, in the domain of renewable energy resources, demands the "pro-consumer" who simultaneously produces and consumes energy. Such a transformation of civil societal protest from *against* to – also entrepreneurial – participatory forming is programmatic for the concept of sustainability.

Sustainability asks for far-reaching democratic innovations in the sense of a multi-dimensional approach which takes up the practices of sustainability employed by pioneer groups, which opens up civil societal space for the latently present change of values and which, on the level of a change of institutions, consequently secures it structurally. The change of society which started off in Poland with its people turning away from communism and ushering in the end of the Cold War, which came as a big surprise to many people, is to be regarded as the most interesting model of a society full of hope for a new "Great Transformation" to a sustainable society from the perspective of political science.

The idea of the responsible citizen actively helping shape initiatives of sustainability, which see their beginning in concrete local initiatives, is not only a moral-political postulate but meanwhile also in the worldwide "Transition Movement" social reality. Just in Germany there are more than 120 groups and initiatives as part of it. In his current survey, Rob Hopkins, the founder of this movement, has his motto make the point: "Simple. Now. Act. How we ourselves take the future in our hands".

From the point of view of WBGU, raising consciousness is the heart and motor of sustainable development. He talks of transformative education for a systemic

understanding of options of acting and approaches to solutions. The importance of “transformation competence” today can be compared to the basic cultural skill of being able to read and write as a condition for societal participation and responsibility in the modern world of “transformative literacy”. The first place where such moral competence and the readiness for responsibility are practised is the family (John Paul II).

6. Cultural: Lifestyle and a New Model of Wealth

Sustainability does not only stand for a social- technical programme of saving resources but above all for a new ethical-cultural orientation. The modern day paradigms of progress and unlimited growth are to be replaced by the guiding principle of a development embedded in metabolic cycles and time rhythms of nature. In the future only what can be carried by the conditions of nature deserves being named “progress”.

Sustainability stands for a new definition of prerequisites, limits and goals of progress. Instead of “faster, higher, farther” safeguarding ecological, social and economic stability of human living spaces as well as the considerate aversion of risks will become central principles of reference of societal development and political planning. The most urgent need for ecological action and the largest potential for financial savings for a post-fossil and post-nuclear model of wealth lie in the area of energy (Federal Government 2010). Of decisive importance in this context is linking innovative technology, organisational optimizing as well as personal changes of attitudes and thus the connection of three strategies: sufficiency (thriftiness), efficiency (technological optimization) and substitution (renewable instead of fossil energy).

Sustainability criticises the fixation of cultural ideas of the good life on goals in life as governed by economics. A “culture of sustainability” acknowledges the protection of nature as a cultural task and integrates the quality of the environment as a fundamental value in the cultural, social, health political and economic definition of wealth. It expresses the re-discovery of the ethics of moderate living. On the societal level they aim at a new ecological model of wealth. A sustainable life style does not aim at foregoing wealth, but rather at intelligent, resource- and environment- friendly structures of consumption and distribution for as many people as possible including future generations. Long-life and repair- friendly products, repairing instead of throwing away, quality through tailored services, shared use of goods furnishes workplaces, saves resources and frequently also saves money.

The conceptual flaw of many models of sustainability lies in their allotting the area of lifestyle and consumption exclusively to the private sphere. It is correct that this sphere cannot and should not directly be controlled politically or

governed. Nevertheless, the private decisions of the consumers are subject to structural moulding and constraints which can easily be changed. Thus the model of the eco-social market economy which for example was promoted by the churches already in 1985 puts forth the necessary regulatory expression of the concept sustainability. Only by means of the interplay of supply and demand can set patterns of consumption be changed.

Often sustainability serves as a green coat for the models of development and growth of yesteryear. This is one of the main reasons why the credibility of the concept has taken a beating. Frugality and moderate living in the lifestyle of the rich nations as well as the elites of the threshold and developing countries is a conceptually indispensible element of sustainability. The uncomfortable element of sufficiency has been taken little note of in the present models of political and economic rhetoric of sustainability. One rather talks of “green economy” and “sustainable growth” (e.g. in the German strategy of sustainability of the Federal Government 2011, as well as at the UN-Conference for Sustainability in Rio 2012).

The necessary change of values for sustainable patterns in consumption, production, mobility and lifestyle will not succeed on the basis of moral appeals for renunciation. It rather needs a cultural transformation of the ideas of a good and successful life. The rediscovery of the value homeland and being rooted in one’s own living space has become an important and much discussed dimension of the cultural transformation for sustainability. This leads to a flourishing of regional movements and new forms of local citizens’ shared responsibility.

7. Theological: Belief in Creation and Sustainability

The World Watch Institute in Washington assumes that the “change of course” of global society to a sustainable development may be successful if religions intensively share responsibility. The specifically religious potentials lie in the spiritual orientation, the long-term ethics, the global forming of a community, the ritual endowment of life with meaning and its institutional anchoring. So far these have been activated only minimally. In other words: the discourse on sustainability is “ productive for religion” to the extent that it raises basic issues on the long-term future and global responsibility and from there also poses questions critically inquiring religions about their contributions for solving the problem. As the oldest global institution on our planet the Church is commissioned in a special way to stand up for global and inter-generational justice. Also for the churches bridging the responsibility between responsibility for the creation and sustainability poses a tedious learning process. The same way the Christian thinking of charity was understood ethically in terms of virtues throughout centuries and became politically active only in combination with the principle of solidarity, the belief in the creation is in need of a

translation into ethical, regulatory categories to become politically valid and justiciable and to make plain the concrete consequences in the organisational structures and economic decisions.

Therefore sustainability should be anchored as a fourth social principle in the Christian ethics today. Free democracy does not only rest on the values respectively social principles of personality, solidarity and subsidiarity but also on the principle of sustainability. Sustainability is the categorical imperative of modern responsibility for the creation. For Christians the concept is able to and must translate the ethical stimuli of faith into the fields of actions for shaping the future of society. Assuming with John Paul II that Christians have an "ecological vocation", they are directed to the path of sustainability today.

As regards the political importance of the religious dimension of sustainability, there was an interesting impulse from some Latin American countries at the Conference on Sustainability in Rio in 2012. Thus, among others, Peru, recurring to the pre-Columbian notions of nature, has anchored in its constitution the protection of "Mother Earth" and respectively demanded a new ethical orientation in international politics. The "Institute for Advanced Sustainability Studies (IASS), which was founded under the leadership of Klaus Töpfer in Berlin-Potsdam, in scientific and political debates stands up for strengthening such religious connotative ideas of nature – especially so in the context of the pluralistic culture of global society – to make possible a path to modern times with less stress on resources.

A belief in the creation which points at the limits of humankind with a certain humility and modesty is a decisive corrective of some interpretations of the concept of sustainability which make out of it a guiding utopia of the 21st century for a global eco-social and economic management. Often the ecological knowledge within the framework of sustainability only serves for extending the claim for dominating nature instead of critically asking for the ethical-political and cultural conditions for a long-term control of said knowledge. Without depth dimension of anthropology and natural philosophy the discourse on sustainability remains uncritical and often degenerates into a discourse of mere adaptation. Some things that currently are discussed under the heading "geo-engineering" are not only risky to a large extent but can be misused. From the perspective of all world religions, the ability for responsibility needs intelligent self-restraint.

The mental barriers of turning away from the model of unlimited growth also have theological causes. The human being harbours a need for an open, meaning endowing horizon. As many people do not find transcendence in a religious idea of any kind, they project it into the future as a space of seemingly unlimited possibilities. Thus the "principle of hope" also serves a deep socio-

psychological function and can hardly be got rid of despite all cognitive objections.

The knowledge of the limited opportunity of humankind to steer complex, historical processes can lead to imperturbability. Religious language expresses this metaphorically: “the future lies in God’s hands”. Such an attitude of trusting God is to strictly be distinguished from passivity and rather to be characterised as an attentive expectation. In forming an attitude of attentive imperturbability, which is of key importance for sustainability, the Christian faith can play a substantial role.

Frequently, however, the discourse on the environment refers to the remaining rest of religious ideas in a reverse way. They are used to intensify reproaches of guilt and apocalyptic fears of the future. This fits to a culture moulded by the media where only *bad news f*inds attention but contradicts the Christian basic impulse as the “gospel”, a message of joy which keeps a critical distance from the promises of modern optimism of progress but also their apocalyptic reversal. Such a highly sensitive balance is a decisive element of the concept of sustainability. From the sources of the Christian faith it can gain trust in the meaning and the shaping of the future without following the utopian promises of an optimism of progress.

To Carlowitz, the inventor of the term, sustainability is a mental attitude which he describes as deference to the creation as well as partaking in its creative-generative power.

Translated from the German by York R. Buttler