



SUSTAINABILITY: A PERSPECTIVE OF THE HISTORY, THE BOOM AND THE PERVERSION OF A SCIENTIFIC TERM OF FORESTRY

Hans-Joachim Weimann

Biebertal, Germany

OLD PRACTICE

It happened in the spring of the year 445 before Christ. Nehemia reports his conference with King Ataxerxes: *It came about in the month Nisan in the twentieth year of Ataxerxes the king... I said to the king, May the king be living forever: Is it not natural for my face to be sad, when the town, the places, where the bodies of my fathers are at rest, has been made waste and it's doorways burnt with fire... Further, I said to the king, If it is the king's pleasure, let letters be given to me for the rulers across the river, so that they may let me go through till I come to Judah. And a letter to Asaph, the keeper of the king's park, so that he may give me wood to make boards for the doors of the tower of the house, and for the wall of the town, and for the house which is to be mine. And the king gave me this, for the hand of God was on me.*¹ „King's Park” means the famous Cedar-forest of the Lebanon. We see Asaph as an early forester with the duty to protect the existence of the forest realizing an idea of sustainability (fig. 1).

In the Capitulare des Villis of Charles The Great (Abbot Ansegis), 812 n. Chr.: *Where forests must exist, the officers should not tolerate that they are cut too much and devastated.*

1 Nehemia 3, Verse 1,3,7 und 8.

Ulrich Grober, author of a remarkable book about “Discovering sustainability“, remembers John Evelyn (fig. 2), who 1664 wrote a book with the title “*Sylva or a discourse of forest trees*” with the motto: *Let us arise and plant* and the idea of long-term planning. The book became famous. The effect was minimal.

Veit Ludwig von Seckendorff (1626–1692) (fig. 3), Court and Privy Counsellor of Duke Ernst I. of Saxony-Gotha published a groundbreaking book in 1656, the time of recreation after the Thirty Years War. It is hard to translate the title “*Teutscher Fürstenstat*”. We may try “*The German Autocratic State*”. At the pages 211–215 we find the following farsighted sentences, written in a time of greatly reduced population: *The Greeks call wood the substance generally, because it is necessary in any case. Therefore a ruler, whom the good Lord gave forests and wood, has the duty as father of the house and country to protect them, that the necessary quantity of each species of wood is available. ... Because by the removal of wood for the proper use of the court, for the needs of employees, of poor, spent or meritorious people, for the free use of timber by communities, based on old rights, a large area and quantity may be deforested and devastated, because a good big tree, oak or fir, needs more than 100 years to reach full growth, since some places are not suitable to become forest again, because coppice needs 10, 15 or 20 years of growth depending on the quality of the site. The rulers diligently tried to avoid wood shortage by forest regulations and the employment of foresters. In all cases of the removal and selling of wood, especially for other purposes than normal firewood and building timber, for sawmills and iron hammers, the foresters must take control. They must ride in the forest and observe it daily, to know and to understand, that the licensed cut does not exceed the growth, rather a perennial steady use of timber for the ruler and the country remains, year by year, at the present time and for the descendants. Therefore they must treat the forests and open the area of cut regarding the age, that old wood is not ignored and made worse and young wood is not overused.*²

2 „... die Griechen mit Recht das Holtz insgemein die Materi nennen / gleichsam es bey keiner Sachen zu entbehren / daher einem Regenten, der mit Wäldern und Gehölzen von dem lieben Gott begabet / nicht übel anstehet / sondern in dessen / alß des gemeinen Landes- und Hausvaters / vorsorge und trewe Anstalt mitlauffet dieselben also in acht nehmen zu lassen / daß von Jeder gattung Holtz die Notturfft vorhanden sey. ...

Demnach aber durch den Holtz vertrieb / durch die ordentliche / notturfft der Fürstl. Hoffstat / Diener Deputat, Gnadenholtz / so armen verbrandten / oder sonst verdienten Leuten gereicht wird / Ingleichen durch die freyhe Hölztungen / deren auf vielen Wäldern von Altershero viel Gemeinden zum bawen und brennen berechtigt sind / ein großer Bezirck und Vorrath an Holtz mit der Zeit abgetrieben und verödet werden kan / auch ein rechter starcker Baum / Eichen oder Tannen in 100 Jahren seinen rechten Wachstumb kaum erreicht / mancher Ort sich gar nicht wieder bestockt / daß Buschholtz auch nach Fruchtbarkeit des Orts 10, 15 und 20 Jahre zu seiner aufwachsung haben muß / So sind zur Vorkommung des Holtzmangels und verödung der Wälder / die Landesherren hin und wieder durch außlassung ihrer Waldordnung und Bestallung ihrer Forstbedienten fleissig bedacht gewesen: Denn bey allem Holtzverkauff und verlassung / sonderlich aber / was nicht zum nötigen Bau- und Feuerwerck / sondern auf die Schneidt oder Brettmühlen / auff die Eisenhammer und dergleichen angewiesen werden soll / müssen die Forstbeampte zusehen / und

THE WORD

Now it is time to look at the word. The German word “Nachhaltigkeit”, a forest term up to the Conference of Rio, is a combination of two elements “Nach” shows the view to the future. “Halten”, to hold, means maintaining.

A very old track of the word was found in the German Latin encyclopaedia of Josua Maaler (1529–1599), named Pictorius, printed 1561 in Zürich.³ “*Eim Ding fleiszig nachhalten*” – sustain an aim diligently – was translated to “*assectare*”. Supported by the Latin German hand-and-school-dictionary of Menge-Güthling we reach the information: *continual allegiance of an applicant around a political office*. Failing this try we look for firm ground with the forest usage.

Hans Carl von Carlowitz (1645–1714) (fig. 4), Saxon mountain captain, is the author of a book about the economy of forest culture, which appeared in 1713. Citing Seckendorff he wrote: *If not all possible means are applied that equality occurs between regeneration, growing and felling of the wood, then lack must result. ... Therefore the maximum of art, science and diligence must realize cultivation and conservation of wood, to cause a continual, resistant and **sustainable** use, because this is indispensable to keep the essence of the country.*⁴

That was the birth of a groundbreaking technical term of forestry. Then followed 300 years of concept purification, concept development and of use. The question is worthwhile how foresters understood it.

Between von Carlowitz and the so-called forest classics there are the good publications of Beckmann (1700–1777), von Zanthier (1717–1778) and von Burgsdorff (1747–1802). Here as a representative of the classics I would like to

der Wälder gelegenheit / indem sie dieselbe täglich bereiten und damit umbgehen / also wissen und verstehen / daß durch die Anweisung über den Ertrag der Hölzter nicht gegriffen / sondern eine immerwehrende beständige Holtznutzung dem Herrn / und eine beharliche Feuerung / auch andere Holtznotturfft dem Lande von Jahren zu Jahren bey ihrer Zeit und künftig den Nachkommen bleiben möge / daher müssen sie auch die Wälder also angehen und daß gehewe / oder den Hieb und John / wie mans nennt / also eröffnen / wie es die Aelte und wuchs des Holtzes und die gute ordnung erheischet / daß nicht Altes übergangen / und Junges noch nicht vollwüchsiges zu Früe angegriffen und das Alte indessen schadhafft werden möge.“Veit Ludwig von Seckendorff: *Der Teutsche Fürstenstaat*, Frankfurt/M 1656, p 211 ff:

3 Josua Maaler: *Die Teutsch spraach*, Zürich (Froschouwer) 1561.

4 „Wenn nicht .. alle ersinnliche Mittel angewendet werden / daß eine Gleichheit zwischen An- und Zuwachs / und dem Abtrieb derer Hölzter erfolget / so .. muß .. Mangel entstehen. ... Zu mehrer Erläuterung wollen wir die Worte des Herrn von Seckendorff hierauf einführen / welcher... in seinem Teutschen Fürsten Stat .. sich also vernehmen läßt: Demnach durch den Holz-Vertrieb... (vgl. Fußnote bei Seckendorff). Wird derhalben die größte Kunst / Wissenschaft / Fleiß / und Einrichtung hiesiger Lande darinnen beruhen / wie eine sothane Conservation und Anbau des Holtzes anzustellen / daß es eine continuirliche beständige und nachhaltige Nutzung gebe / weil es eine unentberliche Sache ist / ohne welche das Land in seinem Esse nicht bleiben mag.“ *Sylvicultura oeconomica oder Haußwirthliche Nachricht und Naturmäßige Anweisung zur Wilden Baum-Zucht*, Leipzig (Braun) 1713, pp. 87 and pp.105.

concentrate on Georg Ludwig Hartig (1764–1837). Worldwide fame was gained by those sentences with which Hartig justified his idea in a textbook of 1804: ... *there is no permanent forest management conceivable and to be expected if timber exploitation from forests was not based on sustainability. Hence, every wise forest administration has got to assess state forests immediately and to exploit them in a way that ensures future generations at least as much benefits as the current generation is making use of.*⁵

During his period of service in Dillenburg, Georg Ludwig Hartig (fig. 5) developed perspicacious management plans for the Nassau-Oranian forests. The principality owned many old-growth and densely stocked forests. Future yields were distributed over the next 30 years and the then following generations. The portion corresponding to one generation was denominated a “Fach“, the entire plan was called a “Fachwerk“. The underlying idea was a kind of an intergenerational contract, however, this term had not yet been known at that time. The long planning period was the result of production cycle and life expectation of the young stands. At that time, the foresightedness of this planning was criticized; nevertheless, it resulted imperatively from the nature of things. The length of the growing period has to be considered while planning the utilization of mature (exploitable) timber.

We know an article, printed in 1814, about a talk near Ilmenau. Friedrich Schiller (fig. 6) met a forester, who worked on the installation of such long-termed Fachwerk-Plan. Schiller was interested and the forester explained the system of thinking and calculation. The poet admired it very much and is cited with the words: *You foresters are great. The fruits of your quiet diligence will mature to the late future generations.*⁶ By the way, the extreme length of the life of stands makes caution to be a duty of first rank. So caution may be a principle of great importance, perhaps not less than sustainability. But this is the topic of another essay.

Gustav Baader (1878–1956) (fig. 7), Gießen, understood finally in his textbook about forest stocktaking and planning the sustainability as duration, steadiness and equal quantity. If one formulates it in such a way, the question follows, from what? It is a well-arranged understanding, that saying sustainability must also be saying of what one wants duration, steadiness and the same quantity. One can mean a state, which should be sustainable, or an effect, that should be produced year after year in the same kind and quantity. Which effect should be sustainable, this has been seen rather differently in the German forest history, according to the requirements and the need. There has come about, finally, a forest convention

5 „Es läßt sich keine dauerhafte Forstwirtschaft denken und erwarten, wenn die Holzabgabe aus den Wäldern nicht auf Nachhaltigkeit berechnet ist. Jede weise Forstdirektion muß daher die Waldungen des Staates, ohne Zeitverlust taxiren lassen, und sie zwar so hoch als möglich, doch so zu benutzen suchen, daß die Nachkommenschaft wenigstens ebenso viel Vortheil daraus ziehen kann, als sich die jetzt lebende Generation zueignet.“ Taxation der Forste, erster Theil, Gießen (Heyer) 1819, p. 1.

6 König G. 1814. Schillers Weidspruch (Report about a meeting of Friedrich Schiller and Karl Christoph Oettelt in the forest near Ilmenau), Sylvan, Marburg und Kassel, pp. 153.

which wants sustainability as the maximum fulfilling functions of the forest, the benefit functions, protective functions and recreational functions.

EVALUATION OF WOOD PRODUCTION

From 1824 to 1828, Professor Carl Justus Heyer (fig. 8), one of the “classics”, reforested an area of 400 ha of the Giessen town forest – which had been deforested and further degraded by pasture – against political and scientific opinion. He said: *Since immemorial times, the wasteland has not brought any other utility to the town than serving... as pasture... better as site of hunger... for a herd of cattle of the poorest face and four big flocks of sheep of similar quality. To leave them further on in this wretched destination would be... a true sill on actual and future generations.*⁷ His student Martin Faustmann then developed the famous formula which fits to such undertaking.⁸ It submits the basis for decisions on using bareland for afforestation as well as for the maintenance and tending of the growing stands. How to achieve the highest possible value of the soil by optimized forest management? This is his question. That was the birth of the theory of investment and the birth of the theory of forest soil rent.

One problem results from the comparison of opportunity costs and the expectation on the rate of return by the investor. Forestry in Germany is mainly concentrated on poor sites which do not serve for agriculture. Hence, the forest-agriculture border is the result of long years of experience. Traditionally, beneficiary functions of the forests are being claimed by the society but rarely remunerated. The risks of forest investments are high because of the longevity of trees and the late break-even point. Forest enterprises have no means of defense against the consequences of globalization. Forests must remain where they are. The practice of large scale forest plantations we know from the southern hemisphere would not be tolerated in Central Europe. Perspectives of a forest's production period, which could be overlooked during a human life were regarded short-sighted and immoral. An acrimonious dispute arose among the followers of the theory of soil rent and the ones of the theory of the highest income on forest capital which lasted for several decades. After having studied many publications I conclude that this dispute was unnecessary. Strangely, the opinion persisted that both were contradicting management methods for one and the same case. However, the situations where one or the other fits are as different as they can be. The deforested soil which is due for reforestation – case “development” – is not equal to the forest meant to be sustained – case “sustainability”.

The misunderstanding did not exist for Hartig and Faustmann. Hartig had written a book on investments related to afforestation/reforestation: “Which tree species give the best return from plantations and how relates this return to the

7 Allgemeine Forst- und Jagdzeitung (1829) p. 286.

8 Faustmann M. 1849. Berechnung des Wertes, welchen Waldboden sowie noch nicht haubare Holzbestände für die Waldwirtschaft besitzen, Allgemeine Forst- und Jagdzeitung 25 (1849) pp. 441.

one from agriculture?” It was published in 1833.⁹ On the other hand, the formula for the highest profit on forest capital also appeared in the publication of Faustmann (1849) describing the case of balanced age-classes: *harvest cut + thinnings – costs for plantation establishment – other costs*. Both knew the opposed situation in each case and their specific consequences. Yet, perception and opinion ignored this understanding. In 1948 however; professor Lemmel of Göttingen University, who had the fame to have refuted scientifically the theory of soil rent answered laconically to a student’s question regarding the trueness of the two theories: “Both!”

The principle of sustainability is logical. It was momentous and successful. But then a catastrophe of thinking happened and was topped at the UN Conference on Environment and Development in Rio de Janeiro.

THE BOOM OF THE WORD

Let us look to the steps of this tragedy.

1951 Food and Agricultural Organisation of the UNO – FAO – Rom: “Fundamentals of forest politics”.

1958 Ecumenical Council of Churches, Stockholm: “ecologically sustainable society”.

1980 IUCN and UNEP dominated by the World Wildlife Fund: “World Conservation Strategy – Living Resource Conservation for sustainable Development”.

1980 ”North-South – A Program for Survival”.

1987 UN – World Commission on Environment and Development (Brundtland / Desai) (fig. 9, 10):

“Sustainable development is development that meets the needs of the present without compromising the ability of the future generations to meet their own needs.”

In the famous sentences of Hartig 1804 the meaning is the same: “every wise forest administration has got to assess state forests immediately and to exploit them in a way that ensures future generations at least as much benefits as the current generation is making use of.” New is the addition of the word “development”. That is the mistake.

Now we reach the 1992-UN-Conference on Environment and Development, Rio de Janeiro. Approximately 10.000 delegates represented 178 states. Such a big number of participants largely precludes constructive cooperation. It might have been an event meant for agreeing on previously prepared declarations. Rightly, the principle of sustainability, which had been developed in the forestry sector alone, was necessary to be applied in the environmental and economic sectors. It might have been unfair, but is possibly forgivable, that the provenance of the word was neglected. The focus was laid on developing countries and their needs.

9 Hartig G.L. 1833. Gutachten über die Frage: Welche Holzarten belohnen den Anbau am reichlichsten und wie verhält sich der Geldertrag des Waldes zu dem des Ackers? Berlin (Duncker & Humblot) 1833.

The word „development“ was added to „sustainability“. This was correct. But: There is strictly a time sequence. Where nothing is – something has to develop. Where everything is alright – there is no need for development. The developed has to be sustained. It should have been denominated „development“ and „sustainability“. Regrettably it was called „sustainable development“. That is how it can be read in the declaration on „Environment and Development“ of the UN Conference of Rio. That is well-intentioned linguistic nonsense. Development becomes the substantive. Sustainability is degenerated into an adjective.

Grober on page 292:

Coupling the words sustainable and development is problematic. When development basically means opening up and economic growth it is confusion. But wherever the original sense of the word, namely the development of a certain potential, is meant, sustainability is gaining momentum in this coupling.

The Conference of RIO was the begin of a Boom, the boom of a word, the word “sustainability”. It became the taste of something good in every possible and impossible sense. The traditional meaning was forgotten.

SOME CURIOUS EXAMPLES

2001 the Chancellor of The Federal Republic of Germany (fig. 11) established a prominent “Council of sustainable development”. The chiefs of forestry reclaimed partnership and offered their experience. The answer was a refusal: *The positions are given. The aspects of forestry will be managed by the expert of nature protection.* Now we see as members of the council four experts of nature protection, one member of agriculture, many Politicians and Representatives of big business, no forester.

2003 the German minister of finance Hans Eichel (fig. 12) in a press conference: *We live by sustainability – beyond our means.*

The METRO-Group powers big-sized advertising with a field of pumpkins and the slogan: “We especially sustainable – and that especially sustainable!”

The CEO of the Süwag Energy AG was asked in the June of 2011: *Mr. Ziedrich, everybody proclaims sustainability. But it is difficult to get it. What is the meaning of the chief of a big regional provider?* Hi answered: *Energy providers must spare the environment. We understand sustainability based on three columns: green production, green networks and green products.*¹⁰ Now I know: Sustainability is a color. But the green color of a forest is different from the green color of politics.

And now let us try with Google. Four accidental shots will follow:

Question: Sustainability + Commerce?

214.000 Offers.

10 NN: Wir setzen auf Nachhaltigkeit, grüne Erzeugung, grüne Netze, grüne Produkte, in „Stadt der Zukunft“, Berlin (Reflex) Juni 2011, p. 7.

Example: The Commerz Real Estate Assets offers an open Investment fund after acquisition of an “ecological sustainable object in Birmingham” “One Sno-whill” with the worldwide known Certificate of Sustainability “BREAM” (BRE Environmental Assessment Method”)

Question: Sustainability + Trade?

17.800.000 Offers.

Example: THE GS1 – “Global Standards Connecting Business” – offer as topic of a commercial meeting: Sustainability in business as usual – from producer to trade and back – Collaborative Sustainability Management in consumption economics.

Question: Sustainability + Criminality?

1.380.000 Offers.

Example: Arno Plack, who in 1974 pleads for the abolition of the criminal law, considers Criminality connected with sustainability, because less Criminality is more quality of life.

Question: Sustainability + Prostitution?

2.130.000 Offers.

Example: The Vienna Green party praises a new prostitution law as sustainable solution of problems.

Leaving this chaos of abuse and misunderstanding let us return to forestry.

THE FATE OF GERMAN FORESTRY

After linguistic criticism a literary example is following. The life of „Faust“ in Goethe’s (fig. 13) drama ends with considerations on an investment in land management. It is about land reclamation by draining a swamp area. Such undertaking was considered meritorious at that time. Faust says:

*A swamp lies there below the hill,
 Infecting everything I’ve done:
 My last and greatest act of will
 Succeeds when that foul pool is gone.
 Let me make room for many a million,
 Not wholly secure, but free to work on.
 Green fertile fields, where men and herds
 May gain swift comfort from the new-made earth...
 He only earns his Freedom and Existence,
 Who’s forced to win them freshly every day.¹¹*

So far about cultivation, the development! And then, finally, the success! One may think about conservation, preservation, unconditional handing over, and sustainability. Faust expresses it as follows:

*Then, to the Moment I’d dare say:
 „Stay a while! You are so lovely!“
 Through aeons, then, never to fade away*

11 A.S. Kline, 2003.

*This path of mine through all that's earthly. -
Anticipating, here, its deep enjoyment,
Now I savor it, that highest moment.*¹²

That is the moment when Faust's pact which he had concluded with the devil, if fulfilled. During life, the aspiring human being shall not enjoy such luck. For Faust, such „highest moment“ is the time of his death.

Likewise, achieving sustainability is made more and more difficult for German forest administrations. I saw the mishap starting when less and less young, well-trained colleagues managed to begin their desired career in forestry. The reduction of an already small number of foresters must have consequences for presence, visibility and influence. Deficits in the presence of foresters are followed by an occupation of the vacant space by experts of other scientific fields. Those experts do not want to enter and experience the forests from the inside. Even superficialities can be disputed.

Finally let us look at primary productions. Agriculture is permitted and supported. Forestry must and is neglected. The political influence of agriculture depends on farmers' votes. Trees don't vote and foresters are rare. The time of the big reputation of forestry was the time of the big value of wood. I don't see wood as the only purpose of the forest idea. But – perhaps and it is to be hoped – the value of wood may regenerate the reputation and influence of forestry.

The actual fate of forest administration and science in Russia and Germany seems near to a catastrophe. But between those misfortunes the spirit of forest culture Gołuchów is living as sustainable traditional value.

REFERENCES

- BAADER G. 1942. Forsteinrichtung als nachhaltige Betriebsführung und Betriebsplanung, Frankfurt/M (Sauerländer).
- EVELYN J. 1664. Sylva, or a Discourse of Forest Trees, London (John Martyn for the Royal Society).
- GROBER U. 2010. Die Entdeckung der Nachhaltigkeit – Kulturgeschichte eines Begriffs, München (Kunstmann).
- RYKOWSKI K. 1997. Forest Policy Evolution in Poland, in: O. Thomas Bouman / David George Brand: Sustainable forests: global challenges an local solutions, Binghamton NY (Food Products Press): 119–126.
- STEINSIEK, PETER-M.: Nachhaltigkeit – Zur Karriere eines Begriffs, Katalog, Exposition „Unter Bäumen – Die Deutschen und der Wald“, Dresden (Sandstein) 2011, pp. 90
- WEIMANN H.-J. 1993. Natur Struktur Kultur – Graphiken zum Wald in Hessen, Forschungsberichte der Hessischen Forsteinrichtungsanstalt und der Hessischen Forstlichen Versuchsanstalt, Band 17, Gießen/Hann. Münden.
- WEIMANN H.-J. 2003. Wurzeln der Nachhaltigkeit (The Roots of Sustainability). Forst und Holz 58 (6): 153–155, LWF aktuell 37: 34–37.

12 A.S. Kline, 2003.

- WEIMANN H.-J. 2005. Die Förster und die Zeit – Zu Waldboden, Entwicklung, Wald und Nachhaltigkeit. In: Land, Agrarwirtschaft und Gesellschaft, 2004, 15 (2): 49–62, Nachdruck im Jahresbericht, 2005 des Hessischen Forstvereins: 127–138
- WEIMANN H.-J. 2010. About Taking, Giving and Receiving, Aspects of Sustainability in the Publications by Georg Ludwig Hartig and Martin Faustmann, in Forstökonomie in einer dynamischen und sich ändernden Welt, Schriften zur Forst- und Umweltökonomie, 36, Frankfurt/M (Sauerländer): 31–35.

SUSTAINABILITY: A PERSPECTIVE OF THE HISTORY, THE BOOM AND THE PERVERSION OF A SCIENTIFIC TERM OF FORESTRY

S u m m a r y

The story of sustainability is told beginning with the year 445 BC and the management of the cedar forest of the Lebanon. Hans Carl von Carlowitz (1626–1692), founded on Veit Ludwig von Seckendorff, was the first, who used „sustainability“ as a scientific term of forestry. Then 300 years followed with concept purification, concept developing and of use by foresters. The steps of a modern boom of „sustainability“, regarding the need of developing countries are outlined between the FAO-conference 1951 and the conference of Rio 1992. The analysis is focused on the misfortune of the word-combination „sustainable development“. „Development that meets the needs of the present without compromising the ability of the future generations to meet their own needs“ is a good aim. „Sustainable development“ is a bad way to say this. It is well-intentioned linguistic nonsense.

Key words: sustainability, development, theory of forest soil rent, theory of the highest income, intergenerational contract, developing countries

ZRÓWNOWAŻENIE: PERSPEKTYWA, INTENSYWNY ROZWÓJ POJĘCIA I JEGO WYPACZENIE W ODNIESIENIU DO LEŚNICTWA

S t r e s z c z e n i e

Początki pojęcia „zrównoważenie“ sięgają 445 r p.n.e. i wiążą się z gospodarowaniem lasami cedrowymi w Libanie. Hans Carl von Carlowitz (1626–1692), opierając się na Veit Ludvig von Seckendorff, był pierwszym, który użył pojęcia „zrównoważenie“ jako naukowego terminu w zakresie leśnictwa. Kolejnych 300 lat miało na klarowaniu pojęcia, jego rozwoju i wykorzystywaniu przez leśników. Współczesny bum dotyczący się tego terminu, a odnoszący do potrzeb krajów rozwijających się, rysuje się w przedziale czasowym pomiędzy konferencjami: FAO w 1951 roku i RIO w 1992 roku. Przeprowadzona analiza jest ukierunkowana na nieszczęśliwą słowną kombinację „zrównoważony rozwój“. „Rozwój, który zaspokaja potrzeby współczesnych pokoleń, jednocześnie nie pozbawiając przyszłych pokoleń szans na zaspokojenie ich potrzeb“ jest właściwym celem.

Stosowanie w tym przypadku terminu „zrównoważony rozwój“ jest niewłaściwe. Jest to słuszny w swym założeniu lingwistyczny nonsens.

Słowa kluczowe: zrównoważenie, rozwój, teoria czynszu leśnego, teoria największego dochodu, międzypokoleniowe porozumienie, kraje rozwijające się



Fig. 1. Gustave Doré 1866: Cedars of the Lebanon; “A letter to Asaph, the keeper of the king’s park, so that he may give me wood.”

Ryc. 1. Gustave Doré 1866: Cedry Libanu; „List do Asaph, opiekuna królewskiego parku, który mógł dostarczać mi drewna.”



Fig. 2. John Evelyn: “Let us arise and plant!”
Ryc. 2. John Evelyn: „Powstańmy i sadźmy!”



Fig. 3. Veit Ludwig von Seckendorff: “a perennial steady use of timber for the ruler and the country year by year in the presence and for the descendants”

Ryc. 3. Veit Ludwig von Seckendorff: „odwieczne stałe wykorzystanie drewna dla potrzeb władcy i kraju oraz dla potomnych”



Fig 4. Hans Carl von Carlowitz: “eine kontinuierliche, beständige und nachhaltige Nutzung” – constant, continual and sustainable use

Ryc. 4. Hans Carl von Carlowitz: “eine kontinuierliche, beständige und nachhaltige Nutzung” – stałe, ciągłe i zrównoważone użytkowanie



Fig. 5. Georg Ludwig Hartig: “the profit of future generations”

Ryc. 5. Georg Ludwig Hartig: „zysk przyszłych pokoleń”



Fig. 6. Friedrich Schiller: “The fruit of your quiet diligence will mature to the late future generations.”

Ryc. 6. Friedrich Schiller: „Twoja cicha praca zaowocuje dla przyszłych pokoleń.”



Fig. 7. Gustav Baader: “Duration, steadiness, equal quantity.”

Ryc. 7. Gustav Baader: „Czas, stabilizacja, równa ilość.”



Fig. 8. Carl Heyer: “To leave the wasteland in the wretched destination would be a true sill on actual and further generations.”

Ryc. 8. Carl Heyer: „Pozostawianie niezagospodarowanych terenów będzie prawdziwym wyzwaniem dla aktualnych i przyszłych pokoleń.”



Fig. 9. Gro Harlem Brundtland: “Success stories in developing countries”

Ryc. 9. Gro Harlem Brundtland: „Historie zakończone sukcesem w krajach rozwijających się”



Fig. 10. Nitin Desai: "Development to eliminate the essential needs of mankind". Like Mathew 11,28: "Come to me all ye that labor and are heavy laden, and I will give you rest."

Ryc. 10. Nitin Desai: „Rozwój dla wyeliminowania koniecznych potrzeb ludzkości”. Za Mateuszem 11,28: „Przychodźcie do mnie ciężko pracujący i przygnieceni, dam wam odpoczynek.”



Fig. 11. Gerhard Schröder: "Council of sustainable development without foresters." Ryc. 11. Gerhard Schröder: „Rada zrównoważonego rozwoju bez przedstawicieli leśnictwa.”



Fig. 12. Hans Eichel: "We live by sustainability – beyond our means."

Ryc. 12. Hans Eichel: „Żyjemy obok zrównoważenia – ponad stan.”



Fig. 13. Johann Wolfgang Goethe: "Let me make room for many a million."

Ryc. 13. Johann Wolfgang Goethe: „Niech zrobię miejsce dla milionów.”

