

R O Z D Z I A Ł 2 .

RURAL LIFE BY THE THOUGHT OF THE ‘DE-GROWTH’ THEORY
– IN MEMORIAM OF ADAM SADOWSKI¹

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Introduction

The aim of the chapter is to highlight the idea of the ‘degrowth’ theory. All participants of the agricultural product chain must find the optimal solution and strategy concerning the main principles of sustainability. Based on the literature and on our own research results, a content analysis was carried out and logical modelling was used to apply the theory to agriculture. Thus, the paper begins by discussing the topic of sustainability in agriculture. Then, we explore the concept of ‘degrowth’ and business in the context of the thoughts of Serge Latouche³.

¹ The paper is based on the paper presented at the 14th European Rural Development Network Conference, Budapest, 3–5 October 2016 and published in *Rural Areas and Development*, 14th issue, K. Takács-György, I. Takács, A. Sadowski, *What kind of new solutions do we need to increase efficiency of land usage? – case studies from Poland and Hungary (who wins?)*, p. 61–74; and it is also based on the following publications: Takács György, Takács 2016; Takács György K, Takács 2017.

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³ S. Latouche, *Petit traité de la décroissance sereine [Farewell to growth]*, Fayard, Paris 2007.

2.1. The concept of sustainability in agriculture

Arable land is one of the key resources in agriculture and the life of rural areas. Setting aside the question of resource limitation, the need for increased efficiency of land use is highlighted. From one perspective, efficiency has a technical meaning: yield efficiency for the given land area, soil and climatic conditions. The other perspective is production efficiency, a term that is closer to economic efficiency and includes the questions of market (demand, price, subsidies, etc.), farm assets and facilities (property, ownership, size, market connections, memberships, geographical location, level of capital and machinery, management skills, etc.). There are different explanations of efficient land use, from organic production to intensive, integrated plant production systems based on up-to-date technologies and chemical use. The different technologies vary widely concerning the types and the amount of inputs, the application of research and development results, and innovation that took place in agriculture in recent decades.

But who knows what is the real efficient use of arable land? From the wider perspective, land use cannot be set apart from the territorial, rural questions. Frequently mentioned is the important role of small agricultural enterprises, not only in the economy, for the employment and rural development, ensuring viability of local households and sustainable rural life⁴. To reach these goals, all individual farms should operate in an efficient way that means at least having a viable size for their revenues to cover all costs – including the personal/family income at the prevailing social level – and ensuring necessary investments. By ‘viable size’, we mean such farm size (at certain production structure and yield level) which in

⁴ B. Tocco, S. Davidova, A. Bailey, *Labour adjustments in agriculture: evidence from Romania*, “Studies in Agricultural Economics” 2014, 116(2), p. 67–73, <https://doi.org/10.7896/j.1406> [accessed: 18.05.2019]; M.M. Tudor, *Small scale agriculture as a resilient system in rural Romania*, “Studies in Agricultural Economics” 2015, 117(1), p. 27–34, <https://doi.org/10.7896/j.1503> [accessed: 18.05.2019].

the given economic environment allows at least such income to be reached that covers production costs, including necessary investment and ensuring the satisfactory standard of living for the farmer⁵.

By using the term 'efficiency', we consider its economic meaning that implies the connection to the question of sustainability. In recent decades, the new paradigm of agricultural research and development has been based on the interaction of three factors: ecological sustainability, economic efficiency paired with equal opportunities, and mutual assistance of governmental and non-governmental sectors to improve the performance and profitability of farming systems.

As sustainable land use is linked with the protection of environment, all agricultural land use should focus on those aspects and requirements. Land use implies it can and should be used as the main, limited natural resource with moderate to high input use, and economic efficiency as defined above. Agricultural production with moderate input usage should meet the restrictions, regulations and some provisions aimed at environmental protection which have to be implemented. The economic benefits can be increased by sparing and protecting natural resources, without (or at least only at a low level, i.e., those that can be renewed) polluting the environment, in the framework of the system of sustainable development. The main characteristics of such agriculture are:

- reduced water use (precision irrigation);
- energy saving systems;
- optimisation of chemical use (precision farming, site-specific);
- appropriate technologies (under given circumstances);
- in harmony with the environment;
- focus on quality production (including the questions of food safety);
- importance of human capital and human skills.

⁵ K. Takácsné György, *A családi gazdálkodás méretére ható tényezők modellvizsgálata I* [Model analysis of factors affecting family farm size I], "Gazdálkodás" 1994, XXXVIII(4), p. 65–69.

To be genuinely sustainable, land use should be sustainable from the point of view of land, soil, water, biodiversity (environment), from the economic point of view (how to be viable, competitive, generate adequate income for the farmers, and for the rural communities) and also sustainable in terms of social aspects ('Feed the world'). It should also ensure social sustainability.

The term 'sustainable development' includes the current and long-term sustainable production and the controversies of environmental protection that assure the right quality of life, and difficult to prevent, but tolerated, conflicts⁶. Social sustainability includes the necessary food production and industrially based energy production, and, from the farmer's point of view, compliance with the profitability criteria, and the responsibility of sustaining the environment. Without economic sustainability, environmental and social sustainability cannot be realised. So, the question for the farms is how to operate efficiently given their viable size. The responsible behaviour of all participants (producers, consumers and society) involves finding a degree of intensity and technology of production matched with a type of farm technology appropriate for the environment (such as organic, conventional, integrated, and precision extended form of integrated approach)⁷. To find new ways of agricultural development and innovation,

⁶ G. Chilinsky, G. Heal, A. Vercelli, *Sustainability: Dynamics and Uncertainty*, Kluwer Academic Publishers, Dordrecht–Boston–London 1998, <https://doi.org/10.1007/978-94-011-4892-4> [accessed: 04.04.2019]; R.A. Turek, *Sustainable agriculture – between sustainable development and economic competitiveness*, [in:] *Sustainable Technologies, Policies and Constraints in the Green Economy*, R.A. Turek (ed.), IGI Global Publishing, Hershey 2013, p. 219–235, <https://doi.org/10.4018/978-1-4666-4098-6.ch012> [accessed: 13.04.2019].

⁷ M.N. Mawapanga, D.L. Debertin, *Choosing between alternative farming systems: An application of the analytic hierarchy process*, "Review of Agricultural Economics" 1996, 18(3), p. 385–401, <https://doi.org/10.2307/1349623> [accessed: 13.04.2019]; J. Stull, C. Dillon, S. Shearer, S. Isaacs, *Using precision agriculture technology for economically optimal strategic decisions: The case of CRP filter strip enrolment*, "Journal of Sustainable Agriculture" 2004, 24, p. 79–96, https://doi.org/10.1300/J064v24n04_07 [accessed: 07.04.2019]; K. Takács György, I. Takács,

it is also important to focus on sustainable economy that is nothing else than social sustainability.

2.1. Theory of 'degrowth' and business

The wide expanded interpretation of sustainability has a strong connection to the new paradigm: 'degrowth'. This new theory connected to the question of a sustainable future in the economy emerged at the very beginning of the 21st century. The main meaning of 'degrowth' is not unfamiliar, it is a movement towards a sustainable future, combining ecological economics, anti-consumerism and somehow anti-capitalist beliefs. The roots of the movement originate with The Club of Rome report of 1971 entitled "Limits to Growth". Estimates suggest the population will exceed 9.2 billion in 2050 and increase demand for food by 50–70 percent, while the consumption pattern evolves towards high quality foods. The Earth's growing population generates increasing demand not only for the limited natural and man-made resources, especially food, energy, drinking water, but also for the liveable space. To this list one must add the issue of migration due to climate change. For agriculture, the main task is not only to ensure food security but safe food and viable rural areas as well. To maintain the above-mentioned aims, the economy, agriculture and environmental management all have a significant role⁸.

Risk Assessment and Examination of Economic Aspects of Precision Weed Management, "Sustainability", 2011(3), p. 1114–1135.

⁸ *Our Common Future*. World Commission on Environment and Development, Oxford University Press, Oxford 1998; L. Ryden, *Education for global responsibility V Sustainable Development*, 1998, available at http://www.bup.fi/BUPfilm/Lars_film_site/texts/sustainable_text.pdf [accessed: 03.12.2015]; S. Mészáros, *Nemnövekedés: egy új gazdasági paradigma európai fejleményei* [No growth: European developments in a new economic paradigm], "Gazdálkodás" 2011, 3, p. 259–265; J. Popp, K. Pető, J. Nagy, *Pesticide productivity and food security*, "Agronomy for Sustainable Development" 2013, 33(1), p. 243–255, <https://doi.org/10.1007/>

Decades before the (re)appearance of the moral economists, an etologist, Konrad Lorenz⁹, wrote his novel *Die acht Todsünden der zivilisierten Menschheit* (English translation published in 1974: *Civilised man's eight deadly sins*). The author states that environmental, ecological and social processes have economic consequences for business life: degradation of biodiversity, reduction of agricultural and rural areas has huge effects on individual enterprises, production mix, technology, direction of innovation, etc. To be successful participants of business life they need to give appropriate answers, trying to reach their optimal behaviour. Although the increase in consumption can be a leading force of economic development, the question remains: why an increase in the use of limited resources, and what is the limit of the current resource use? The limitation will increase the production cost, so many enterprises will cease to exist if consumers will do not accept their output.

Serge Latouche¹⁰ summarised the principles of degrowth in his book *Petit traité de la décroissance sereine* (in English: *Farewell to growth*). According to those principles, population growth is not the only cause of environmental problems. The allusion to this hides the ethical and moral questions that require a joint society action. According to Latouche, a revolution in culture and behaviour is needed to degrowth. Some of the latest economic trends content to these principles. The necessary steps for degrowth are the following:

- Re-evaluate: in our age individualist megalomania, a rejection of morality, a liking for comfort, and egoism are accepted and we feel it is normal. It is necessary to go back to the old 'bourgeois' values of honour, public service, the transmission of knowledge, 'a good job well

s13593-012-0105-x [accessed: 01.04.2019]; K. Takács-György, I. Takács, *Some ideas about site specific crop production and theory of degrowth*, "Növénytermelés" 2016, 65 (Supplement), p. 67–70.

⁹ K. Lorenz, *Die acht Todsünden der zivilisierten Menschheit* [The eight deadly sins of civilized humanity], "Serie Piper", Bd. 50, Piper Verlag, München 1973.

¹⁰ S. Latouche, *Petit traité de la décroissance sereine* [Farewell to growth], Fayard, Paris 2007.

done', frankness and mutual trust, respects for human rights, nature and society. It is necessary to re-evaluate the idea of poor or rich and developing or developed.

- Reconceptualise: we must, for instance, redefine the concepts of wealth and poverty; deconstruct the infernal couple of scarcity/abundance on which the economic imaginary is based, which is a matter of urgency.
- Restructure: adapt the productive apparatus and social relations to changing values. Make equitable policies in production tools and social sources. For example, some car factories need to be converted to make products for recuperating energy through cogeneration. The question is how much it costs and who will pay for it.
- Redistribute: it means redistribution of access to natural heritage at the global, social, generational and individual levels. Direct effects of redistribution weaken the power of 'world consumer class' and especially the power and wealth of big predators. It helps to solve the problem of distribution between North and South and pay back the earlier ecological debt. Thanks to redistribution, developed countries can give an example and avoid the resistance of "North" countries.
- Relocalise: production on a local basis. Relocalisation is an economic, political and cultural issue. Fortunately, there are more and more positive examples of growth of local economies. For example: direct marketing, short supply chains and local service nets. The free movement of ideas is not restricted but it is necessary to minimise the movement of physical resources. All production needs should be carried at the local level. The 'Think global – Act local' philosophy is equivalent to the relocalisation principle.
- Reduce: reduce our habitual overconsumption and the incredible amount of waste. Think the products which goes together a social demand and artificial enkindle needs. Need to reduce health risk and place prevention in the foreground. A recommendation is to change 'mass tourism' to regional travel.

- Re-use: we have to reduce conspicuous waste, fight the built-in obsolescence of appliances and recycle waste that cannot be re-used directly. The Olympic Basketball Stadium in London (2012) is a good example because it was the biggest temporary building and after the Olympic Games it was dismantled and sub-divided for reuse elsewhere.
- Recycle: recycling is part of our everyday life. There are many good examples of recycling. For example, the parts refurbishing programme for Peugeot. In this programme the parts are renovated so that the price of service will be low, but the quality remains. Another example is waste cloth that is made from waste paper. The secondary use of biomass energy is also a good example.

These principles could lead our life to a different society where free cooperation and self-imposed rules are not a utopia. Re-evaluation is emphasised because this is the basis for the other seven principles. In addition, co-operation should be exchanged for competitive methods in business and everyday life. Latouche does not use the term ‘cooperation’ but his idea is equivalent to this. Egoism needs to be exchanged for altruism, and hedonism needs to be replaced by chivalry. It is necessary to change the goal of our life. The new goal will be to share assets rather than obtain property. The emphasis could be placed on social links and not on consumption. To realise degrowth it is very important to reduce consumption, recapture reasonable production and increase free time (and intelligent activities in free time). According to Latouche, localisation is a very important issue. His aim is to spread the ideology of local production and local consumption all over the world. Due to the limitation of this study, the concept of ‘Consume less, share more’ is only mentioned, without any elaboration.

The main conclusions of the First International Conference on Economic Degrowth for Ecological Sustainability and Social Equity in Paris in 2008 and the so-called Barcelona Conference of 2010 must be added to the question of ‘degrowth’. The main focus was how to implement the

'degrowth' theory in society, in daily life. Some practical solutions are the following (not all are listed): promotion of local currencies, reforms of interest, transition to non-profit and small-scale companies, increase of local commons and support of participative approaches in decision-making, reusing empty housing and co-housing, elimination of mega infrastructures, transition from a car-based transportation system to a more local, biking and walking-based.

Other authors¹¹ highlight the importance of learning the new principles of economic cooperation. The basis of cooperation is a moral economy instead of a benefit economy¹². Transition from the economy of even more to the economy of enough is of the utmost necessity. The role of cooperation to share resources, strengthen the market position with concentrated products is an important element of current agriculture and farming. In countries where a fragmented farm structure prevails (not only based on the concept of local production – local consumption) cooperation is needed. The need for cooperation and trust among business participants is sector-neutral, but has an important role in agribusiness¹³.

¹¹ F. Fukuyama, *Trust: The Social Virtues and the Creation of Prosperity*, Free Press, New York 1995; T. Sedláček, *Economics of God and Evil: The Quest for Economic Meaning from Gilgamesh to Wall Street*, Oxford University Press, New York 2011.

¹² N. Georgescu-Roegen, *Energy and Economic Myth*, in N. Georgescu-Roegen (ed., 1976), *Energy and Economic Myths: Institutional and Analytical Economic Essays*, Pergamon Press, New York 1972, 3–36; H.E. Daly, *Steady-State Economics*, Island Press, Washington 1991.

¹³ P.N. Wilson, *Social capital, trust, and the agribusiness economics*, "Journal of Agricultural and Resource Economics" 2000, 25(1), p. 1–13; H. Andersson, K. Larsen, C.J. Lagerkvist, C. Andersson, F. Blad, J. Samuelsson, P. Skargren, *Farm Cooperation to Improve Sustainability*, "A Journal of the Human Environment" 2005, 34(4), p. 383–387, <https://doi.org/10.1579/0044-7447-34.4.383> [accessed: 01.04.2019]; G.G. Szabó, *The importance and role of trust in agricultural marketing co-operatives*, "Studies in Agricultural Economics" 2010, 112, p. 5–22; I. Takács, *Games of farmers – to cooperate or not?*, "Annals of the Polish Association of Agricultural and Agribusiness Economists" 2012, 14(6), p. 260–266; Zs. Baranyai,

Conclusion

To be competitive in the agricultural market, individual participants (i.e. farms) have to be efficient. It is necessary to find and keep consumers for the future, adopt new methods and solutions, and apply up-to-date technologies. The role of knowledge in improving – both technical and economic – efficiency, strengthening the market and social connections and networks is high, but the success depends on positive attitudes to changes and novelty of people. The sustainable operation means today: appropriate answers to changes, focusing on the future, finding new solutions and ways to reach and keep consumers at a viable farm size.

A variety of different farming strategies is needed. The appropriate solution(s) can be based on the up-to-date technologies, results of implemented innovations, traditional farming, taking into consideration local needs, and co-operation among farmers to meet the requirements of globalisation. Innovation and cooperation are ways for ensuring food security while open innovation lets business partners and consumers share in the innovation process: cooperation instead of competition.

Based on the ‘degrowth’ theory, the task is to find new solutions with sharing the resources and knowledge through cooperation. The new values (Réévaluer – reappraise) suggest the intent of preserving nature at least in the current condition. Efficient use of natural resources (Restructurer – restructuring factors of production) needs introduction of innovative solutions. Each farming strategy that involves farmers’ cooperation is the basis of efficient machinery use (Restructurer – restructuring of social relationships), each technology that reduces the human-health risk (Réduire – reduction) points in the direction of degrowth. In local economies, taking part in resource sharing formations, cooperation or an open innovation chain – this is such behaviour that meets some characteristics of the new

G.G. Szabó, M. Vásáry, *Analysis of machine use in Hungarian agriculture – Is there any future for machinery sharing arrangements?*, “Annals of the Polish Association of Agricultural and Agribusiness Economists” 2014, 16(3), p. 24–30.

paradigm of 'degrowth' and shows the direction of a sustainable world. The connection between the 'degrowth' concept and the use of new, innovative technologies or turning back to traditional farming ensure food production with less environmental burden and less waste, and allows the increase of land use and strengthening of a local society (local production – local consumption).