

## The importance of the degrowth concept in the 21st century

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The article addresses the problem of degrowth, approached as a socio-economic process reducing human pressure on the environment (the detoxification of nature) by setting alternative economic goals and recognising other boundaries (ecological and social) in the socio-economic development. Its main purpose is to systematise knowledge about degrowth and attempt to answer the question whether the concept of degrowth has a chance of becoming a new real paradigm of socio-economic development in the 21st century. A critical analysis of the source literature covering the problem of socio-economic development paradigm and the concept of degrowth was the starting point of the research. The empirical study relating to the problem of shortening food supply chains in Poland serves as an example illustrating the practical implication of degrowth. The conducted analysis showed that the concept of degrowth may become a new paradigm of socio-economic development in the 21st century. It requires, however, further changes in the institutional system as a controlled process of changes.

**Keywords:** socio-economic development paradigm, degrowth, anti-goods, short food supply chains

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### 1. Introduction

Crisis situations in science constitute an incentive to search for a new paradigm, which is often identified with the scientific revolution manifested in a breakthrough moment when the previous paradigm is replaced by a new one. The climate crisis is undoubtedly a phenomenon which poses a threat to entire humanity. Unfortunately, the current global policy to counteract climate change has turned out to be ineffective (Raftowicz, 2021). It can therefore be concluded that in the modern, globalised economy, research on socio-economic development should go beyond the so far adopted indicators and economic models. The concept of degrowth represents one of such innovative approaches described in the source literature as a niche and interdisciplinary paradigm in economic theory (Weiss et al., 2017).

The main goal of the presented considerations is to systematise knowledge about degrowth and attempt to answer the question: does the concept of degrowth have a chance of becoming a real paradigm of socio-economic development in the 21st century?

The structure of the study, consisting of four sections, arranged to reflect the above objectives. The first explains the essence of the socio-economic development paradigm, while the second describes the genesis and essence of the concept of degrowth. The third section addresses the importance of the concept of degrowth in the 21st century, and the fourth discusses the problem of shortening food supply chains as a practical implication of growth. The fifth section presents the final conclusions.

The starting point of the research was the critical analysis of the source literature covering the socio-economic development paradigm and the problem of degrowth, whereas the empirical research on shortening food supply chains serves as an example illustrating the practical implication of degrowth in Poland.

## **2. The paradigm of socio-economic development in the 21st century**

A paradigm defines specific laws, theories and their applications, as well as models and scientific values (Kuhn, 1962). A paradigm shift occurs when an increasing number of anomalies (both external and internal) appear in the present paradigm, which leads to scientific revolutions (Heller, 2011, p. 76). The currently observed anomalies undoubtedly take the form of a progressing ecological crisis, often regarded as an indirect product of globalisation (Raftowicz, 2021).

However, in the social sciences (as opposed to other fields of knowledge) there is no single theory that fulfils a paradigmatic function, because socio-economic development is an extremely complex process. The basic categories of socio-economic development determinants refer to economic, social, natural, legal, political and even image aspects (Parysek, 2018). However, it can be adopted that in a market economy, socio-economic processes depend primarily on changes in money flows and its resources. Money is a means of access to private goods and an end in itself for all operating business entities (Matysiak et al., 2017).

Socio-economic development is created by a bundle of interdependent processes being progressive and degressive at the same time, as illustrated in Figure 1.

The socio-economic consequences of development processes (both progressive and degressive) may result from intended (overt processes) or unintended (hidden processes) actions of the state, a specific social group or even an individual, which has a positive or negative impact on society (Sztompka, 2005, p. 35). It can be generally accepted that development processes are hidden when they do not cause changes of a monetary and financial nature (i.e. they do not affect production costs or income). Otherwise, an overt process takes place.

An example of a hidden degressive process is the degradation of the natural environment, because market prices do not reflect the actual environmental costs and

ecological truth (Brown, 2003, p. 245). Although society has a growing knowledge about sustainable development (Badanie), the awareness alone is not a sufficient condition to trigger reactive processes in society. This results from the fact that hidden processes go beyond the category of external effects (positive or negative), depending only on the activities of socio-economic entities. In the case of hidden processes, such a relation does not exist if there is no financial dimension. To recap, it can be concluded that hidden processes are generated by the socio-economic system, and especially by the market mechanism (Matysiak et al., 2017).

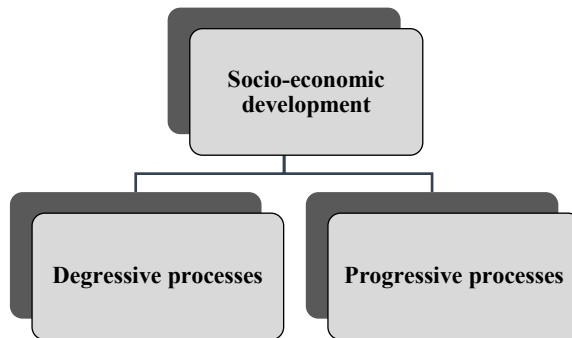


Fig. 1. Processes of socio-economic development

Source: author's compilation based on Matysiak et al. (2017).

However, the progressive process hidden in the capitalist system is manifested by an economy of surplus, which means a permanent excess of supply over demand in the markets. In the centrally planned economy system, a shortage was considered the normal state, i.e. a surplus of demand over supply. In both cases, the process was hidden because it was generated by the system rather than its components (Matysiak et al., 2017). The processes of production and consumption are progressive in the surplus economy, due to the fact that the competition between bidders occurs only in the economy of surplus, as a result of which the quality of goods and the variety of goods increase along with decreasing prices. The economy of surplus also stimulates the desires and whims of consumers, which are also intentionally stimulated by producers, as reflected, e.g. in the deliberate obsolescence of products and/or aggressive marketing activities (Furgacz, 2016).

In turn, the economy of surplus is also a hidden degressive process, as it is responsible for the excessive use and waste of resources or loss of biodiversity (Rockström, J. et al., 2009). The prices of non-renewable resources in the natural environment are not adequately reflected in production costs and consumer spending and their level does not depend on the size of resources, but on the stream of supply and demand. Hence, a conclusion can be drawn that the ecological barrier to socio-economic development remains hidden for both producers and consumers.

Contrary to appearances, the alternative to excessive consumption is neither moderation nor green consumerism. These processes do not reduce scarcity in capitalism and therefore do not ensure sustainable development in the market economy. The main cause of shortages in the market economy is the pro-efficiency process, expressed in an increase in labour productivity, and ultimately in higher GDP per capita. This process has also a degressive dimension, because its undesirable and unintended global effect is an insufficient increase in aggregate demand. This is an unintended effect of the activities carried out by enterprises which, motivated by profit, minimise production costs, primarily labour costs, and maximise sales revenues. However, what is rational on a micro scale is undesirable on a macro scale. Although green consumerism reduces energy consumption in the economy, which is pro-ecological in nature, its dissemination is limited by the demand barrier. In other words, green consumerism *ceteris paribus* will only be a niche market for people who prefer a healthy lifestyle and have adequate income at their disposal (Matysiak et al., 2017).

The presented arguments show that the modern world is dominated by a neo-liberal paradigm of development, where economic development is of crucial significance with economic growth as its important component. Equating development and growth is characteristic of the industrial economy and the accompanying paradigm of mainstream economics (Kiełczewski, 2021, p. 350).

On the one hand, this growth stimulated the development of industry, agriculture, transport, trade and urban planning, but on the other, it contributed towards overloading the natural environmental systems of our planet. In practice, this is primarily manifested by the continuously increasingly higher pollution of the environment and the excessive consumption of natural resources, both renewable and non-renewable. Despite the growing ecological crisis, which has a negative impact on economic development, a clear social resistance to a radical change of the paradigm prevails, as it would require the reconstruction of the entire socio-economic system (Matysiak et al., 2015). Permanent and irremovable discrepancies between the theory, consistent with the current paradigm, and the actual state, i.e. anomalies, are a clear sign of the ineffectiveness characteristic for the existing methods of practising science. Therefore, the research addressing socio-economic development should go beyond the currently adopted indicators and economic models. One such innovative approach is the concept of degrowth. The question arises at this point, whether the concept of degrowth stands a chance of becoming a new paradigm of socio-economic development in the 21st century.

### **3. The genesis and essence of the degrowth concept**

In the source literature the term degrowth is defined as a niche and interdisciplinary new paradigm in economic theory (Weiss, 2017; Vandeventer, 2016). The paradigm, in accordance with Kuhn's concept, defines specific laws, theories and their appli-

cations, as well as models and scientific values (Kuhn, 1962). In turn, a paradigm shift occurs when an increasing number of anomalies (both external and internal) appear in the current paradigm, which leads to certain scientific revolutions. The progressing ecological crisis, as an indirect product of globalisation is, unquestionably, a visible anomaly (Raftowicz, 2021).

When analysing the source literature, it can be concluded that the problem of degrowth is intensely developing and attracting more and more supporters, as evidenced by the increasing number of publications covering this subject matter (Latouche, 2009; Van den Bergh et al., 2012, Capasso, 2021, Van den Bergh, 2011; Jakob et al., 2014; Kallis et al., 2012; Johanisova et al., 2013; Sekulova et al., 2013). Officially, there are as many as 50 exponents of degrowth, originating from the world of politics, science, literature, and non-governmental organizations, and who contribute to the dissemination of this idea worldwide (Biagini et al., 2017), including: M. Bookchin, P. Kropotkin, L. Tolstoy, Gandhi, A. Camus, S. Jevons, G. Orwell, B. Commoner and I. Illich. The term degrowth was introduced in a public debate for the first time in France in 1972, in the journal entitled “Le Nouvel Observateur” (Gorz, 1972), where A. Gorz discussed the possibilities of achieving global balance, despite the lack of economic growth, or more precisely, in the conditions of ‘degrowth’. It was intuitively perceived as a certain change, creating an alternative path of development, without the primacy of economic growth as a superior value.

However, this concept was introduced to the theory of economics only in 1979, in the title of the publication by N. Georgescu-Roegen (1979), in which the author criticised not only the ‘blind’ economic growth, but also ‘zegism’ (i.e. zero growth), showing that economists wrongly put an equality sign between growth and development. In the author’s opinion, a necessary correlation between development and growth does not exist. Moreover, it is possible to consider development without growth. Following such an approach, economic growth is compatible with a decrease in the rate of depletion and destruction of natural resources, whereas pure growth cannot exceed a certain limit, even though still undefined, without an increase in this rate, unless a significant decline in the number of population is recorded, which is directly related to the “Limits to growth” of the Club of Rome (Meadows et al., 1972) and the law of entropy (Rifkin et al., 1980). Georgescu-Roegen recognized that in the future, “ecologically sustainable development” (unfortunately frequently confused with growth) will have to undergo this physical “degrowth” of human activity, predominantly in the “over-developed” countries as the main consumers of energy and matter. According to the author, the concept of degrowth is inevitable for the truly sustainable development of mankind. He also indicated the imperfections in economic sciences that do not take into account the one-way law of entropy. In his opinion, economics is too material because it does not include human existence, philosophy, culture, and spiritual aspects, whereas *homo oeconomicus* is reduced to the role of a consumer-producer alone. He suggested that, economics – if not deeply rooted in bioeconomics – remains anti-science, harmful to the entire society.

Polanyi also spoke in a similar vein, arguing that nature and people cannot be approached as a category of goods the price of which is determined by the market alone, which anticipates the paradigm of degrowth. In his opinion “There was nothing natural about *laissez-faire*; free markets could never have come into being merely by allowing things to take their course” (Polanyi, 1944, p. 145). Polanyi claimed that the history of capitalism is characterised by antagonistic forces (i.e. the adverse effects of one population occupying the same environment on another one, most often exemplified by the human exploitation of nature). On the one hand, we are experiencing commodification, and on the other, a self-protective reaction of society against the inevitable negative (both social and environmental) consequences of this commodification, which Polanyi refers to as “countermovement”. This is also confirmed by the analyses conducted by the contemporary researchers, e.g. Stuart (Stuart et al., 2019) and Carton (2020), who identify this “countermovement” with the paradigm of degrowth.

At the beginning of the 21st century, the concept of degrowth functioned as an ideology for new consumer attitudes and the formation of socio-political movements based on the foundations of ecological economy (which considers the economy as a part of nature (Daly et al., 2004)), anti-capitalist and anti-consumerist ideas. As postulated by Wilkinson and Pickett (2009) one should try to influence the system of values prevalent in society so that the ostentatious consumption ceased to arouse admiration and envy, and started to be perceived as one of the reasons for the problem, as a sign of greed and injustice destroying both the society and the planet. The social degrowth movements in the years to follow grew in importance within the public space. Their primary demand was to reduce production and consumption. Analysing the correlations between economic growth, environmental destruction and the issues related to social inequalities, the representatives of this trend argue that the model of global economy development based on unlimited economic growth results in the degradation of nature, as well as creates huge inequalities between the rich and the poor – both at the level of countries and within individual societies. The advocates of degrowth are in favour of developing an alternative socio-economic model not based on economic growth. In addition, they are convinced that reducing consumption leads to the actual increase in the quality of life and overall well-being (Jackson, 2009).

In less than two decades, the idea of degrowth has transformed from an activist movement into a multidisciplinary academic field, grounding its assumptions in the thermodynamic economic analysis by Georgescu-Roegen, the need for limiting growth of the Roman Club and the economy functioning in a state of equilibrium by Daly (1973, p. 332; Daly, 1997). The concept of degrowth also draws inspiration from anthropology, sociology and philosophy, and combines interdisciplinary research in the field of ecological economics and industrial ecology (Martínez-Alier et al., 2011).

The first definitions of degrowth did not appear in the source literature until the beginning of the 21st century in the publications by Latouche (2010), Bernard et al.

(2003), Flipo (2017) and Sinaï et al. (2017). They primarily emphasised the need to change not only the economic paradigm, but also its social, political and institutional aspects, or the combination of these determinants. The crucial element of these changes, however, takes the form of voluntary actions aimed at economic degrowth, rather than compulsion. The common feature of degrowth definitions is the identification of degrowth with a ‘deconstruction of reality’ or a ‘detoxification of the environment’. The novelty of degrowth consists in the proposal to open up a new space for innovation and constructive creativity worldwide, in the perspective for exploring new opportunities through setting alternative economic goals and recognising other boundaries (ecological and social). According to Latouche, only this concept is capable of blocking economic totalitarianism, developmentalism and the cult of growth (Latouche, 2010).

Flipo (2017, p. 12-13) identified the transformation towards degrowth with the Schumpeterian example of “creative destruction” (Schumpeter, 1995, p. 102), acknowledging that economic development remains the combination of qualitative and quantitative aspects in the economy that progressively (along with technological and organizational innovations) change the world for the better. Degrowth represents this qualitative element. Schumpeter’s theory is also referred to by Tremblay et al. (2006, p. 248), who claimed that degrowth is an invitation for taking up innovative solutions, although not necessarily based on a “perpetual storm of creative destruction”, but rather resulting from the creative opportunities for green growth and development.

It should be noted, however, that the concept of degrowth differs from other economic categories in the way that degrowth is not a category of negative or zero growth, accomplished only through restrictions, sacrifice or limiting production (Latouche, 2010). Growth continues to be important as it ensures long-term development. Therefore, it can be concluded that degrowth means growth, however, a quality oriented one (Flippo, 2017, p. 12-13): i.e. “clean” and green, in other words, growth not measured by the GDP indicators (Méda, 2014).

In the opinion of Mączyńska (2016), degrowth constitutes a certain pro-inclusive model in which social cohesion is the key driving force for development and a public priority. In this approach, the chrematistic effect and economic growth is just the tool to achieve socio-economic development and not an end in itself. Mączyńska showed that “such a pattern is consistent with the requirements of the civilization of knowledge, releases human capital, strengthens social capital, favours the optimal use of development potential, while promoting innovation, harmonisation and effectiveness of long-term development”. This social aspect of degrowth was also recognised in the study by Tremblay et al. (2006), where degrowth is perceived as the symptom of social development and a change in social attitudes.

Bonaiuti (2018) approached the problem of degrowth more precisely. The author introduces the concept of degrowth in terms of a controlled or uncontrolled (involuntary) phenomenon. The involuntary degrowth was observed during the COVID-19

pandemic in 2020, when freezing the global economy and implementing the principles of social isolation was positively manifested in the condition of the natural environment. Therefore, such uncontrolled, unintended phenomena will not have any long-term impact on the fate of the world, because neither nuclear nor renewable energy sources (at the current state of the renewable energy technologies advancement) are capable of protecting nature in a short time (Bendyk, 2020, p. 116).

Bonaiuti, referring to Georgescu-Roegen's (1982, p. 1-26). Promethean technologies, which may revolutionise the economic system (e.g. the discovery of coal as an energy resource) and which are hardly realistic nowadays (or even impossible since we have reached the 'energetic end'), perceived a solution to the problem in changing the "uncontrolled degrowth" into a "controlled process". This is also supported by Tainter's (1988) analysis addressing the collapse of great civilisations in the world, according to whom, in complex societies everything is based on energy resources, which are subject to the laws of diminishing returns. As Tainter observed, the increase in the complexity of social systems, from a certain point in time, results in higher costs than benefits, which is reflected, e.g. in the decreasing marginal effectiveness of investments in maintaining the essential social subsystems, such as science, health care and efficient community management. Based on the above assumptions and using the Total Factor Productivity, Bonaiuti (2018) analysed the effectiveness of the most advanced economies in the world. The conclusions of his research unanimously confirm that the world's advanced economies are heading towards "involuntary degrowth", thus leading to difficulties in maintaining the current institutional framework of modern civilisation. It follows that only the state-controlled process of degrowth can be identified with sustainable development.

The concept of degrowth, apart from a crowd of supporters, also has a group of critics. Unfortunately, many politicians, businessmen and economists still claim that environmental pollution is a natural consequence of economic development and the price for increasing welfare, which is a kind of compromise between economy and the environment (Puppim de Oliveira, 2012). It is incorrectly assumed that degrowth is nothing more than reducing the production of goods and services in order to protect the environment (Schneider et al., 2010). Some scholars perceive degrowth as the fanatical ideology behind which the frustrations of anti-systemists are hidden (Di Meo, 2006). There are also analyses which show that degrowth is economically unfeasible, and the implementation of these assumptions would contribute to the collapse of the stock market and a stock exchange crash (Tokic, 2012). These arguments are obviously unfounded, because stock exchange crashes were experienced many times in history, and the looming vision of climate disaster will sooner or later result in a financial and economic crisis. This line of reasoning falsely reduces people's purpose on the earth to the price of stocks and the world of the stock exchange. By developing positive visions and presenting implementable solutions, degrowth can contribute to the prosperous but fair, participatory and environmentally sustainable development of society (Weiss et al., 2017). The immediate benefits resulting from



degrowth may be felt by consumers in the areas where this kind of growth has become undesirable, such as healthcare, agri-food and transport sectors.

The presented definitions, however, do not exhaust the entire spectrum of approaches to the problem of degrowth. A correctly constructed definition of degrowth means a socio-economic process that reduces human pressure on the environment (detoxification of nature) by setting alternative economic goals and recognising other boundaries (ecological and social) in socio-economic development.

#### **4. The importance of degrowth in the 21st century**

As the previous analysis showed, the term degrowth is used in the source literature in two different meanings. The first refers to the negative socio-economic consequences of unsustainable growth. From this perspective, it can be called real degrowth. In a narrow sense, real degrowth consists in the atrophy of natural capital, or more precisely in the depletion of non-renewable resources, i.e. oil, gas, rare metals, clean water, etc. The diminishing natural capital resources constitute a threat to future economic growth because future economic growth depends on them. The process of natural capital atrophy is hidden because it is not manifested in supply prices which depend on the flow rather than the quantity of resources. This means that the extent of degrowth is, therefore, known only to experts. As a result, there is no need to save these resources or replace them with artificial capital, even if it is possible with the available technologies.

Degrowth in the second (broader) sense covers the process which consists in levelling and reducing the consumption and emission of anti-goods which, although increasing GDP, are not desirable by the society. Anti-goods represent the negative externalities of production and consumption, which can be divided into global, local and individual. Their global dimension results in their negative influence on people regardless of where they reside and live. Nobody can 'leave the system' on their own, or avoid suffering losses from their presence. Local anti-goods have a spatially limited impact on production and consumption (e.g. smog over the city). Individual anti-goods refer to a particular consumption by people, the harmful effect of which on their health is partial (e.g. stimulants). Individual anti-goods also refer to the consumption, the negative health-related effects of which are hidden to a particular person or not known at all.

In a positive sense, degrowth basically means ensuring both material and institutional conditions for sustainable growth. Degrowth in its positive meaning cannot be identified with zero growth, because it is synonymous with expanding the negative consequences of economic growth, i.e. the consumption of non-renewable resources as well as the production and consumption of anti-goods.

In a positive sense, degrowth involves two processes:

1. The elimination of material effects of unsustainable growth, naturally in addition to non-renewable resources, as the technology for their restitution does not exist. In

this sense, degrowth is reflected better by a medical term, i.e. detoxification, cleansing. Without body detoxification a healthy lifestyle is not possible.

2. In the second sense, degrowth consists in limiting the production and consumption of anti-goods (i.e. a reduction of emissions and savings in the consumption of natural capital).

Nowadays, the problem of detoxification is not yet subject to international regulations (e.g. climate summits). The focus is mainly on highlighting emission reductions and increasing spending on nature protection. The problem of detoxification refers to local and global anti-goods (pollution of oceans, seas, rivers, lakes, forests, soils), however their elimination requires financial outlays; they remain the effect of everyone's actions, but no one is individually willing to finance their elimination (waste).

Negative externalities, i.e. anti-goods, represent the unintended effect of the actions performed by producers and consumers. Excessive consumption is the ultimate cause of a particular production technology. Based on the source literature, it is difficult to distinguish between satisfying needs, i.e. the desired consumption, and the excessive one, satisfying desires and whims. However, it can be concluded that consumption is excessive when the social status of an individual depends on it (i.e. certain (positional) goods are produced which determine the social status of an individual). Sustainable development requires changes, primarily in the structure of social capital. The status resulting from consumption and *homo oeconomicus* cannot represent the main value. The dissemination of values embodied by *homo sustinens* (Graczyk, 2021) depends on social capital. In other words: social capital that degrades consumer and pro-ecological attitudes is a means for positive degrowth. This process has already been initiated by a slow, but noticeable change in consumer behaviour, caused by e.g. increased awareness of individual responsibility and sustainability issues (*Zrównoważony rozwój*). The change, however, still functions to a greater extent at the level of individual units than legal entities. Hence, the institutional level requires changes due to the fact that the essence of the institutional system consists in collective and organized action aimed at shaping, directing and triggering certain positive individual behaviour for the purposes of their development.

## **5. Shortening food supply chains as an example of the practical implication of degrowth**

One of the key elements related to the paradigm of degrowth is the shortening of food supply chains between the producer and the consumer. This is because food is produced in a renewable manner, with no substitutes and, at the same time, constitutes the vital product for human existence.

The idea of shortening supply chains in the food economy (as an alternative form of long chains, which can be identified with Polanyi's 'counteraction') remains the current priority of the European Union (Euractiv), as reflected in the European Green

Deal programme (ec.europa.eu), i.e. the action plan for a sustainable EU economy through turning climate and environmental challenges into new opportunities for sustainable development by 2050. The central part of the Green Deal programme is devoted to the Biodiversity Strategy (environment.ec.europa.eu) and the Farm to Fork Strategy (food.ec.europa.eu), which emphasise a better balance between nature, food systems and biodiversity to protect citizens' health and well-being, while enhancing EU competitiveness. The shortening of supply chains is also a manifestation of consumers' willingness to return to natural, healthy, high-quality food, which stands in opposition to industrial, usually extensively processed food, subjected to multiple mechanical, thermal and chemical processes resulting in the loss of a significant part of its natural, nutritional value.

The revival of the concept of short supply chains in the 21st century was mainly caused by the crisis of the industrial farming model and negative (economic, social and environmental) externalities (anomalies) generated by the extended global food supply systems. An important role in the transition from short to long food supply chains was played by the progressive processes of globalisation and the concentration of land and capital, which contributed to large retail chains and discount stores entering the food market and expecting goods with standard characteristics in bulk quantities. The competition from large, strong agricultural holdings, focused on monoculture and the domination of global agri-food sector networks, put small farms, unable to increase their productivity, in a difficult situation, which contributed to the disappearance of traditional farms producing goods for local markets. Intensive and concentrated agriculture based on global supply chains, which is nowadays dominating in Europe and in the United States, forces farmers to change their approach to both social and natural aspects. Large agricultural monocultures lead to the degradation of the soil and thus require greater inputs of plant protection chemicals. As a result, industrialised agriculture, while significantly increasing its productivity, contributes to soil erosion and increased water demand. Therefore, food is transported over very long distances, on average it travels even 1,640 km to the place of delivery, and 6,760 km (Weber et al., 2008) in the entire supply chain, with farmers having limited control over these chains. Hence, new solutions to stabilise the socio-economic situation in rural areas, consistent with the paradigm of degrowth were intensively investigated. Such a model is characteristic for short food supply chains.

Short food supply chains should be identified with the process of providing agri-food products respecting the principles of sustainable development. This process is based on the following types of proximity: (1) physical, (2) organizational and (3) social (Malak-Rawlikowska et al., 2019). In this approach, physical proximity means local sales, organizational proximity consists in reducing the number of links (a maximum of one sales link is allowable along with excluding commercial networks operating in many geographically dispersed locations), while social proximity is indispensable to ensure ongoing, current and up-to-date communication of knowledge

between the producer and the consumer (based on trust), including the one related to the source of origin of the product (Raftowicz, 2022, p. 64).

The controlled process of degrowth in the context of short food supply chains in Poland was initiated with ordering and simplifying the regulations referring to small-scale processing and sales in Poland, which took place in 2017 along with the introduction of a new form of agricultural activity – agricultural retail trade – and to a significant extent changed the situation. The current legal system in Poland allows agricultural producers to sell their products within the framework of short supply chains in the following forms:

1. direct sales – raw materials and unprocessed animal products,
2. direct deliveries – foodstuffs of non-animal origin (in an unprocessed, pickled/dried form),
3. retailing – food of plant, animal origin or composite food products – unprocessed or processed,
4. agricultural retail trade – food produced in whole or in part from own cultivation, breeding or animal husbandry,
5. marginal, local and restricted activities – subject to treatment or processed food of animal origin and prepared meals (dishes).

Financial incentives were offered along with the implementation of legal regulations. In 2021, the Ministry of Agriculture announced a support programme for short supply chains, under the Rural Development Programme for 2014-2020, with a budget amounting to over PLN 23 million, of which a one-off subsidy of PLN 325,000 could be allocated to the implementation of operations aimed at the means of transport purchase, and PLN 280,000 in other cases.

However, the mere implementation of such institutional solutions and financial support did not automatically translate into mass interest of agricultural producers in short supply chains, as shown by the statistics below. In 2019, only 4,688 (i.e. 0.32%) producers of food of animal origin or food containing both animal and plant products were registered within the framework of agricultural retail trade (ART) (Food Safety, 2019), under the supervision of Veterinary Inspection (VI), and 604 (0.04%) producers of plant-based food under the supervision of the State Sanitary Inspection (SSI). The marginal, local and restricted (MLR) activities attracted 2,113 producers (0.15%), whereas direct sales (DS) 11,267 producers (0.8%). Having assumed that food producers in Poland do not combine these forms, it can be accepted that only 1.67% of farmers were interested in short supply chains in 2019, of which direct sales was the most popular. Compared to the EU average values, this is a very low level, because according to the estimates of the European Parliament, on average approximately 15% of the EU farms (most often the small ones) sell more than half of their production directly to the consumers (Augère-Granier, 2016).

The data published at the end of 2021 show that in the next two years, despite the growing interest of farmers in the forms of sale within short food supply chains (The Department), namely ART – 13,583 entities (including 12,059 under the supervision

of VI (0.85%), 1,524 under the supervision of SSI (0.1%), MLR – 2,230 entities (0.16%), DS – 14,361 entities (1%) (General Veterinary Inspectorate, 2021), which accounts for the total of 2.11%, no significant changes in the attitudes of agricultural producers were recorded compared to 2019, as the overall increase was at the level of 0.44% in relation to farms as shown in Figure 2.

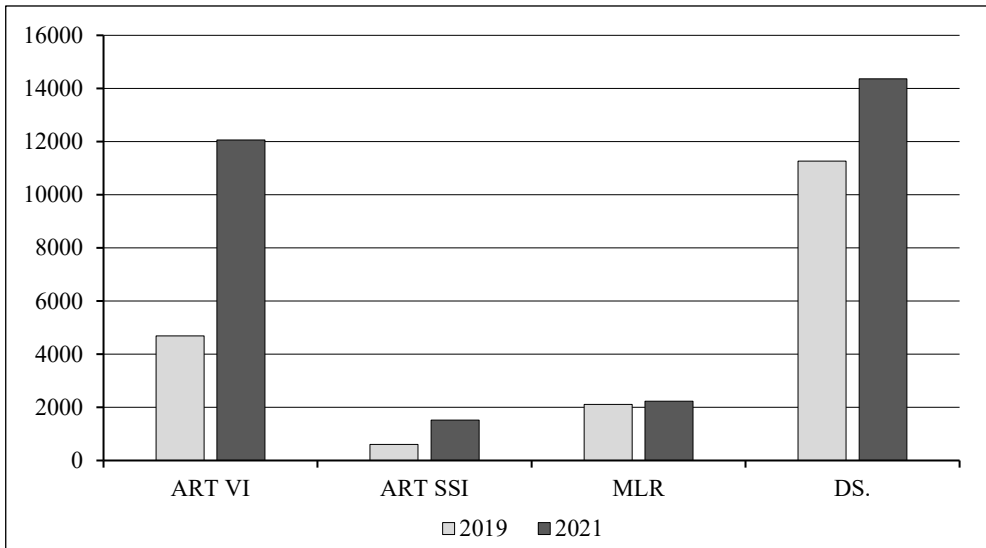


Fig. 2. The share of farmers in short food supply chains in Poland 2019-2021

Source: author's compilation.

At the same time, it should be clearly stated that in Poland the smallest farms (up to 2 ha of UAA inclusive) constitute over one-fifth of all farms. This means that Poland has the potential for the development of small farms and the sale of products in short food supply chains, however, this does not automatically translate into an increased interest among food producers. Institutional regulations are necessary to promote sales in short food supply chains and thus counteract the disappearance of small farms and small-scale food processing, which still represent a largely untapped potential for the production of organic food.

## Conclusions

On the basis of the conducted analysis, it can be concluded that the greatest threat to contemporary development is the natural environment excessively exploited by human economic activity. Hence, new solutions are sought to stabilise the socio-economic situation in order to ensure the integrity of the economic system, and to guarantee its duration as well as decide about it as a whole entity.

One such innovative approach is the concept of degrowth, which is intensely developing and evolving, creating a new, alternative development perspective through setting other goals and recognising other boundaries (ecological and social). Adopting the model of degrowth, which emphasises the levelling and limitation of consumption and emission of anti-goods, can effectively stop the negative effects of the climate crisis which, in the near future, may result in a global economic recession.

An attempt to radically change the paradigm has encountered social resistance, as it requires a change in the socio-economic system. The concept of degrowth has a chance to become a new paradigm of socio-economic development in the 21st century. This process has already been initiated by a change in consumer behaviour, which is caused, among other things, by an increased awareness of individual responsibility and sustainability issues. Further economic transformation towards degrowth requires changes in the institutional system as a controlled process.

Shortening food supply chains is an example of the practical implication of the idea of degrowth. The actual benefit of shortening food supply chains in the environmental sphere is the reduction of resource consumption, the reduction of food waste, the promotion of less polluting production methods (e.g. organic farming), the reduction of greenhouse gas emissions and carbon footprint. In Poland, the idea of shortening food supply chains still remains in its development phase. However, without institutional support, short food supply chains will continue to be replaced by long chains due to the narrowly understood economic reasons that do not take into account the external operating costs incurred by economic entities. In practice, this means the need for greater involvement of the authorities, at every administrative level, in the development of short food supply chains and for undertaking the initiatives also focused on the promotion of bottom-up activities. Moreover, it is important that this programme has the priority status for the development of a particular territorial unit and is implemented in a long-term perspective.

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