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## NEW LABOUR CHALLENGES IN POLISH AND EUROPEAN AGRICULTURAL LAW<sup>1</sup>

### Summary

New technologies, artificial intelligence, or the digitalisation of the economy are challenging lawyers in terms of the functioning of the existing legal instruments as well as the creation of completely new ones. The challenges of the digitalisation era mainly concern labour law. Traditional work performed at the employer's premises is still of great importance, while at the same time the legislator, if only in Poland, regulates new types of employment relationships, such as remote working. However, there is a problem, which is analysed in the article, of how these new legal mechanisms can be applied in various sectors of the economy. One example where this seems to pose difficulties is agriculture. Because some activities in traditional agriculture have to be done physically, the new legal mechanisms may prove ineffective. The article identifies contemporary challenges to labour and agricultural law that need to be implemented, due to technological advances. *De lege ferenda* postulates have been identified in relation to remote working in agriculture, precision farming, agriculture 4.0, or the Smart Village concept. At the same time, it is emphasised that the implementation of all these mechanisms and legal solutions will not be effective without adequate funding.

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## KEYWORDS

labour law, agricultural law, agricultural labour, digitisation of agriculture, innovation, agriculture 4.0

## SŁOWA KLUCZOWE

prawo pracy, prawo rolne, siła robocza w rolnictwie, cyfryzacja rolnictwa, innowacja, rolnictwo 4.0

## INTRODUCTION

The development of new technologies is influencing the way work is done. A rather trivial statement shows that it is followed by the need to develop new legal solutions in the field of labour law, such as, for example, remote work. The legal solutions adopted in Poland create new opportunities for development and unprecedented professional activation.<sup>2</sup> However, they are also connected with quite significant risks in terms of employee control, personal data protection, employee liability, occupational health and safety rules, as well as remuneration methods.

The solutions adopted to open labour law in the area of modern technologies are also applicable in agriculture, provided that we are dealing with an employment relationship. However, it should be clearly indicated, due to the specificity of agriculture, that the application of, for example, regulations on remote working<sup>3</sup> may prove to be very limited. The article will present an assessment of modern labour regulations through the prism of agricultural law regulations. At the same time, the challenges facing labour law in the agricultural sector in the era of digitalisation and computerisation of Polish agriculture will be identified. These challenges are not limited to remote working, they also apply to, for example, precision agriculture,<sup>4</sup> the concept of agriculture 4.0,<sup>5</sup> or the use of unmanned

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<sup>2</sup> I. Coopmans, J. Dessen, F. Accatino, F. Antonioli, D. Bertolozzi-Caredio, C. Gavrilu-scu, P. Gradziuk, G. Manevska-Tasevska, M. Meuwissen, M. Peneva, A. Pettit, J. Urquhart, E. Wauters, *Understanding farm generational renewal and its influencing factors in Europe*, "Journal of Rural Studies", 2021, Vol. 86, pp. 398-409. DOI: 10.1016/j.jrurstud.2021.06.023.

<sup>3</sup> L. Florek, *Prawne ramy pracy zdalnej*, "Z Problematyki Prawa Pracy i Polityki Socjalnej", 2021, pp. 1-14. 19, 10.31261/zpppps.2021.19.06.

<sup>4</sup> A. Dominik, *System rolnictwa precyzyjnego*, Centrum Doradztwa Rolniczego w Brwinowie, Oddział w Radomiu, Radom, 2010, pp. 1-20.

<sup>5</sup> S.O. Araújo, R.S. Peres, J. Barata, F. Lidon, J.C. Ramalho, *Characterising the Agriculture 4.0 Landscape – Emerging Trends, Challenges and Opportunities*, "Agronomy", 2021, Vol. 11,

objects for agricultural work. Already today, farmers are using, for example, bio-sensors, barn sensors and radio transmitters, artificial intelligence algorithms, data processing and databases on cloud servers, as well as the internet of things in their work.

With the challenges facing agricultural labour law also come the risks, which will be tentatively identified in the article. Their explication requires an in-depth analysis, not only legal but above all economic. The implementation of modern technologies is not without the need for investment and, consequently, an increase in the level of public support directed to agriculture. The identification of employment challenges in the digital age should not only take into account the specificity of agriculture, against the background of other sectors of the economy but also distinguish local problems, as the agricultural sector in different countries is at different stages of development in this regard.

There are several important challenges facing labour law but also agricultural law. Firstly, how to apply remote working regulations in agriculture. The infrastructure in rural areas does not seem to be sufficiently prepared. Secondly, how to implement new legal and technical mechanisms related to the digital age in agriculture. The main problem is not only the funds needed for this but also convincing farmers that these solutions will be more beneficial and profitable for them. Thirdly, the challenge is to determine the reconciliation of the various legal mechanisms for shaping labour relations in the countryside, with the new regulations introduced. Most farmers in Poland work either on family farms or in the shadow economy. The challenge is to construct such regulations that would encourage farmers to work in accordance with labour law norms. Fourthly, the challenge is to define the direction of farmers' professional activity, while at the same time ensuring the functioning of at least food security. The law should develop such mechanisms which will allow the professional future of farmers to be shaped, including the impact of the digital age, while at the same time ensuring that the food security of other citizens is guaranteed. The abrupt departure of farmers to other professions may result in a lack of food on the market and thus violate the basis of the functioning of any state.

These are only the most pressing of the challenges facing the Polish legislator in regulating the relationship between labour law and agricultural law in the era of digitalisation and computerisation. New legal instruments, such as the programmes within the National Strategic Plan or solutions centred around the Smart Village,<sup>6</sup> provide help in this respect. However, this requires increased regulation

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p. 667. <https://doi.org/10.3390/agronomy11040667>; S. Monteleone, E.A. de Moraes, B. Tondato de Faria, P.T. Aquino Junior, R.F. Maia, A.T. Neto, A. Toscano, *Exploring the adoption of precision agriculture for irrigation in the context of Agriculture 4.0: The key role of internet of things*, "Sensors", 2020, Vol. 20(24), p. 7091. <https://doi.org/10.3390/s20247091> (accessed 20 December 2023).

<sup>6</sup> L.J. Cole, D. Kleijn, L.V. Dicks, J.C. Stout, S.G. Potts, M. Albrecht, J. Scheper, *A critical analysis of the potential for EU Common Agricultural Policy measures to support wild pollinators*

and is shaped according to the needs not only of technical progress but also of farmers.<sup>7</sup>

## 1. LEGAL POSSIBILITIES OF APPLYING MODERN LABOUR REGULATIONS IN AGRICULTURE

Agriculture, through its specificity in both the legal and economic sense, is at a differentiated stage in the implementation of modern technologies. On the one hand, we are dealing with traditional agriculture, where the basic work is the farmer's own labour on a small individual farm.<sup>8</sup> This is usually done with traditional tools. There is also no hired labour involved. We can only find regulations concerning this work in the sphere of social insurance of farmers and special norms concerning this sphere. This type of work of farmers in Poland is predominant. The implementation of modern technologies or digital innovations in this area is dictated by financial possibilities, which usually depend on public aid and European funds allocated as support for agriculture.

On the other hand, we have super-modern agriculture, which already from the creation of the business plan is programmed to use modern technology at every stage of agricultural production. It is not just about modern equipment, more efficient plant protection measures, or animal husbandry (each with its own corresponding regulation). Above all, the use of remotely controlled autonomous devices,<sup>9</sup> such as drones, for example, or robots for production planning, production control, and damage prevention, is noticeable.<sup>10</sup> Here, skilled hired labour is also often used. These farms are either large-scale or oriented towards highly specialised production. Remote working is also used on such farms. Despite their rather small quantitative representation, they are the backbone of the agricultural economy due to the volume of agricultural products supplied to the market, as well as the rate of real estate occupation. At the same time, it is on these farms

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*on farmland*, "Journal of Applied Ecology", 2020, Vol. 57(4), p. 681-694; P. Gerli, J. Navio Marco, J. Whalley, *What makes a village smart? A review of the literature*, "Transforming Government: People, Process and Policy 16", 2022, No. 3, pp. 292-304.

<sup>7</sup> A.L. Rossouw, M. Garbutt, *Six Roles of ICT in Alleviating Depopulation of Rural Villages Through Improved Quality of Life*, "Lecture Notes in Networks and Systems", 2023, Vol. 624, pp. 341 – 351.

<sup>8</sup> B. Karwat-Woźniak, *Zasoby pracy w polskim rolnictwie indywidualnym i ich wykorzystanie*, "Rocznik Naukowe Ekonomii Rolnictwa i Rozwoju Obszarów Wiejskich", 2015, Vol. 102(1), pp. 70-84.

<sup>9</sup> S. Weymann, *Autonomous agricultural vehicles – the search for new solutions*, "Agricultural Horticultural Forestry Technology", Vol. 6, pp. 4-8.

<sup>10</sup> J. Barwicki, W. Romaniuk, *Wykorzystanie zdalnych systemów rejestracji danych do kontroli pól uprawnych*, "Problemy Inżynierii Rolniczej", 2015, Vol. 1 (75), pp. 15-24.

that we most often have to deal with the application of labour legislation, due to the employment of hired labour.

There is also a third picture of Polish agriculture, as it were, defined by financial aid from the Common Agricultural Policy. It is a medium-sized agricultural holding which benefits from European funds and conducts a fairly traditional way of agricultural production. At the same time, in the process of this production, elements of remote work are used, such as obtaining funds and their settlement, as well as submitting applications, which usually takes place electronically. In this respect, the farmer has to make use of new digital tools to obtain assistance. The subsidies obtained are also funds that are often dedicated to the development of agricultural innovation.

The challenge for the legislator will be to find legal solutions for the use of modern technologies in each of the three cases indicated above. The regulations introduced in 2023 with regard to amendments to the Labour Code<sup>11</sup> do not seem to solve the problem, as the rules for undertaking remote work described there may only be suitable for large-scale farms whose operation is largely based on hired labour. Therefore, it is necessary to look not only for financial incentives for farmers to implement innovations on their farms but also to develop such legal instruments for the possibility of using new ways of employing workers, if only remotely, so that this takes into account the specific nature of agriculture and its various possibilities in Poland. Due to the above typological diversity of agricultural holdings, the assessment of the existing labour legislation in each of the types indicated will be different. Remote working will turn out to be completely useless on small, individual farms, while it will become a necessity on large-scale farms. This differentiation also requires a different legislative approach to the use of modern technology on the farm.

Nowadays, the most numerous legal opportunities for the application of remote working<sup>12</sup> in Poland can be seen in highly specialised farms. There, remote working is not only about filling in applications or electronic business and administrative services but also about the day-to-day running of agricultural operations, using autonomous vehicles or even artificial intelligence. For this, however, well-trained employees are needed who know how to operate this modern equipment and exploit all its possibilities. Therefore, the challenge, perhaps not legal, but organisational, will be to educate farmers to implement innovations on their farms.

In the Polish Labour Code, as amended in 2022 (Act of 2022 amending the Labour Code Act and certain other acts 2022<sup>13</sup>), remote work is considered,

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<sup>11</sup> K. Ziółkowska, *Praca zdalna po zmianach w Kodeksie pracy*, “Radca Prawny Zeszyty Naukowe”, 2023, pp. 55-72, doi10.4467/23921943RP.23.014.18363.

<sup>12</sup> M. Król, *Praca zdalna – cechy, uwarunkowania, implikacje dla procesu pracy*, Katowice 2022, pp. 53-59.

<sup>13</sup> Act of 1 December 2022 amending the Act – Labour Code and certain other acts (Journal of Laws, item 240).

according to Article 67,<sup>14</sup> to be work that can be performed wholly or partly at a place indicated by the employee and agreed with the employer on a case-by-case basis, including at the employee's home address, in particular, using means of direct communication at a distance.<sup>14</sup> On a traditional farm, when working with animals or plants, remote work conceived in this way may not be feasible. At most, it will only be an element of the existing labour duties, such as, for example, remote feeding of animals through pre-installed machines. At the same time, the elimination of traditional work in favour of remote working in agriculture seems to be impossible, even assuming disproportionately high costs in relation to the expected benefits. Therefore, remote working in agriculture should be implemented gradually for each type of a farm.

The Labour Code, in the aforementioned amendment, introduces three types of remote work: total remote work – work performed exclusively remotely (100% of the remote working time); partial remote work, the so-called hybrid work – work performed partly at the workplace and partly in the form of remote work; occasional remote work – performed each time at the employee's request submitted in writing or electronically, for a maximum of 24 days per calendar year.<sup>15</sup> In the case of traditional agriculture, hybrid and occasional work may be of practical importance in application. Combining part of the duties performed remotely and part physically seems to be one of the most sensible solutions. The challenge for agriculture is undoubtedly the implementation of the first type which is exclusively remote working. Returning to the division into the three basic farm types, it seems most likely to occur on large farms as an ancillary function rather than directly in agricultural production.<sup>16</sup>

A rather significant challenge with regard to remote working in agriculture may be its level of profitability.<sup>17</sup> In principle, remote work should be paid in the same way as traditionally performed work. This is undoubtedly made highly difficult by the lack of criteria for determining the remuneration of remote work in agriculture, due to the lack of a market for this work. It is clear that remuneration rates for remote work in agriculture cannot be determined through legislation, but a market for such work needs to be built up in order to talk about the profitability of such work. This requires time and convincing people of the benefits of remote working in agriculture.

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<sup>14</sup> J. Retyk, *Wpływ definicji pracy zdalnej na rynek pracy w Polsce*, "Z Problematyki Prawa Pracy i Polityki Socjalnej", 2022, pp. 1-16, 20. 1-16. 10.31261/zpppips.2022.20.02.

<sup>15</sup> P. Pokutycka, *Praca zdalna jako nowa instytucja prawa pracy*, "Z Problematyki Prawa Pracy i Polityki Socjalnej", 2022, pp. 1-18, 21. 1-18. 10.31261/zpppips.2023.21.01.

<sup>16</sup> M. Lichaczewska-Ziembka, *Zasoby pracy w polskim rolnictwie i czynniki je determinujące*, (in:) A. Siedlecka, D. Guzal-Dec (eds.), *Rynek pracy wobec wyzwań przyszłości. Ewolucja i współczesne uwarunkowania*, Białą Podlaska, 2022, pp. 175-197.

<sup>17</sup> W. Józwiak, J. Sobierajewska, M. Zieliński, W. Ziętara, *Poziom dochodowości pracy a możliwości rozwoju gospodarstw rolnych w Polsce*, "Zagadnienia Ekonomiki Rolnej", 2019, Vol. 2(359), pp. 28-41.

Other conditions stipulated by the legislation will also have an impact on remuneration. Remote working may be performed at the employer's instruction: during a state of emergency, a state of epidemic emergency or a state of epidemic emergency and for a period of 3 months after their cancellation or during a period in which it is temporarily impossible for the employer to ensure safe and hygienic working conditions at the employee's current place of work due to force majeure – if the employee submits, immediately prior to the instruction being given, a declaration in paper or electronic form that he/she has the premises and technical conditions to perform remote work.

In this respect, special conditions have been introduced for parents (especially women) of young children to facilitate remote working. Pursuant to the Polish Labour Code, the employer is obliged to consider the request of a pregnant employee, an employee raising a child up to the age of four,<sup>18</sup> as well as an employee caring for another member of the immediate family or another person in a common household with a disability certificate or a certificate of significant disability, to perform remote work, unless this is not possible due to the organisation of work or the type of work performed by the employee.

These undoubted facilities may not be sufficient for farmers due to the different social security systems. The question arises whether remote work will fall under the regulation of the Act on social insurance of farmers. Will remote work be an agricultural activity within the meaning of Article 6(3) of the Act on social insurance of farmers (it is understood to be an activity in the field of plant or animal production, including horticulture, fruit growing, beekeeping, and fishing)? The challenge for the legislator will be to find an answer to the question of whether remote work can fall under the agricultural activity understood in such a way. The crop or livestock production phases include many activities in their scope. There is certainly a place for remote work there as well. However, this requires a redefinition of the way in which a modern farm is run and how agricultural work is controlled, if only in terms of adjudicating accidents at work. The regulations of the aforementioned Act on social insurance of farmers are not adapted to the functioning of remote work in the Polish legal system in this respect. The success of the new legal mechanisms of labour law will be determined, *inter alia*, by the coherence of regulations related to social security. Working out this coherence seems to be the biggest challenge for the Polish legislator.

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<sup>18</sup> B. Godlewska-Bujok, *Work-Life Balance po polsku – najważniejsze refleksje po nowelizacji z 2023 r.* “Radca Prawny. Zeszyty Naukowe”, 2023, Vol. 2(35), pp. 11-26.

## SMART VILLAGE AND THE CHALLENGES OF LABOUR LAW

One of the more modern solutions for the functioning of agriculture favoured by the European legislator is the Smart Village concept. It assumes that local communities undertake various coordinated actions aimed at implementing innovations in a given village.<sup>19</sup> Sometimes these are single undertakings such as the purchase of computers, organizing educational activities, and promoting agricultural products. Most often, however, they are a combination of different ideas for the better functioning of a village. One such element developed in the example of smart cities is remote working.<sup>20</sup> In rural areas, it is only just emerging, as highlighted in the previous section.

There are many examples of such Smart Villages in Europe, as well as in Poland.<sup>21</sup> At the same time, it is a concept that is reflected in both European regulations and national legislation.

Undoubtedly, Smart Villages can be a legal mechanism that will not only be a transmitter of modern solutions to agriculture but, above all, through a rather flexible legal framework and open financing, can help promote and develop new labour regulations. It will depend on the ideas of farmers to what extent remote working mechanisms will be implemented, no longer necessarily in traditional agriculture. One example is agricultural product exchange, not in traditional markets but through online sales. At the same time, questions arise here as to whether we do not jeopardise food security in this way. Will the remote sale of agricultural produce, for example, be sufficient to meet society's food needs? These types of solutions could be multiplied by adding advanced robot technology, drones, and devices based on artificial intelligence in agriculture.

The Smart Village concept in itself is a challenge for Polish farmers because it will be up to them to decide which solutions will become the point of development of their environment. Therefore, labour law should already offer such legal instruments that will not only encourage a change in the professional activity of farmers by moving away from agriculture<sup>22</sup> but, above all, will take into account, for example, the diverse scope of work, as well as the combination of remote and traditional work, which in most cases is physical.

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<sup>19</sup> D. Guzal-Dec, *Intelligent development of the countryside – the concept of smart villages: assumptions, possibilities and implementation limitations*, "Economic and Regional Studies", 2018, Vol. 3, pp. 32-49 <https://doi.org/10.2478/ers-2018-0023> (accessed 20 December 2023).

<sup>20</sup> S. Wyrwich-Płotka, *Praca zdalna jako element koncepcji inteligentnego miasta*, "Studia Miejskie", 2021, vol. 39, pp. 71-81. 10.25167/sm.2790.

<sup>21</sup> A. Niewiadomska, *Koncepcja Smart Village w kontekście zrównoważonego rozwoju*, "Studia Iuridica", 2021, Vol. 87, pp. 376-387.

<sup>22</sup> W. Kołodziejczak, *Nadwyżka zatrudnienia w polskim rolnictwie – projekcja na tle państw Unii Europejskiej*, "Zeszyty Naukowe Szkoły Głównej Gospodarstwa Wiejskiego w Warszawie Problemy Rolnictwa Światowego", 2016, Vol. 16(31), 1, p. 130.



The National Strategic Plan itself links the development of the Internet in the countryside with the possibility of remote working and, above all, remote learning. Because it will not be possible to pursue the implementation of modern solutions in the countryside, and thus changes in the work structure, without farmers obtaining modern knowledge. Given that their training in stationary form is impossible due to the scope and dimension of work, an opportunity for the development of the digital age in agricultural labour law is to educate farmers remotely and acquaint them with the possible benefits of implementing modern solutions on their farms.

As emphasised in the National Strategic Plan Smart Village “which is based on a bottom-up initiative of the inhabitants to find practical solutions to the various local problems they face and to take advantage of the opportunities offered by new technologies (e.g. bioeconomy, digitisation, RES). The availability of new technologies, especially digital ones, will be an important factor influencing the labour market as it will enable people to find employment, especially young people, without having to migrate, e.g. teleworking (National Strategic Plan<sup>23</sup>). There are high hopes here for the young generation’s approach to remote work and the digitalisation of agriculture. The Polish legislator sees this as one of the recipes for stopping the processes of leaving agriculture and the ageing of the countryside. Without people educated in modern technologies, modern ways of undertaking remote work will mean nothing in rural areas. The challenge, therefore, is to convince young farmers that education in precisely the agricultural sector and staying in the countryside is an opportunity for them to develop.

The aforementioned National Strategic Plan envisages not only the development of Smart Villages but above all Smart Farming and smart SMEs in rural areas (National Strategic Plan, p. 296). Smart Farming in this sense refers to the management of farms using modern information and communication technologies to increase the quantity and quality of products while optimising the required human labour. This will reduce traditional agricultural labour in favour of the use of innovation and digitisation in the broadest sense. For example, Smart Farming includes sensors: soil, water, light, humidity, and temperature management; software: specialised software solutions targeting specific farm types or application-independent IoT platforms; autonomous tractors. These are just a few examples of cutting-edge solutions that will affect the way agricultural work is done in the future. What is needed is not only legal solutions that shape the possibilities for legal use of these technical devices but also legal solutions for influencing work using these devices. The standard rules of legal liability or health and safety may not be sufficient.

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<sup>23</sup> Plan Strategiczny dla Wspólnej Polityki Rolnej na lata 2023-2027 (PS WPR 2023-2027) Act of 20 December 1990 on social insurance for farmers (Journal of Laws 2023, item 208, as amended), p. 66.

The smart solutions proposed by the European law for the countryside will affect the need to find new solutions for labour relations, which will divide traditional work in the countryside and remote work or other (yet to be defined) work using modern techniques and digitalisation. It is largely up to the citizens how these solutions will work, as the European legislator gives them the choice of how to implement a given invention. However, the law should be prepared for basic instruments that will favour the development of agriculture, as well as labour law.

### 3. PRECISION FARMING AS A NEW CHALLENGE FOR LABOUR LAW

Precision farming is not yet a legal category in Poland. This in itself is a challenge for the legislator as technological progress necessitates the creation of a full regulation taking into account many aspects of implementing innovative solutions in the countryside, including labour law. Precision farming is a comprehensive farming system that adapts individual elements of agrotechnology to changing conditions in specific parts of a field, depending on the current state of plant development or soil properties. The necessary data are acquired and processed using highly developed navigation and information technologies.<sup>24</sup>

Precision farming reduces costs as well as increases profits and yields.<sup>25</sup> In the long term, it makes it possible to care for the environment and improve the climate by means of precise dosing of plant protection products. At the same time, it already requires funding and training at this stage. These two non-legislative factors are a challenge for the legislator as he has to define a funding framework and certify acceptable precision farming systems taking care of safety in various dimensions.

For example, this system takes into account the use of drones in agriculture. Already today, satellite systems are used to control applications, e.g., for direct payments and to verify farmers' plots (their size, types of crops). However, the use of drones requires a more comprehensive regulation of the following issues: the use of space above another person's property, the security of data collected, its processing, the confidentiality of acquired know-how, system for controlling the use of these devices, and finally, the definition of what type of agricultural work will be covered by the operation of these devices and under which social security scheme they will be eligible.

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<sup>24</sup> <https://mrjagrotim.pl/pl/aktualnosci/34/rolnictwo-precyzyjne-czym-jest-i-jakie-daje-korzy> (accessed 29 September 2023).

<sup>25</sup> <https://rolnictwoprecyzyjne.eu/> (accessed 29 September 2023).

In precision agriculture, the use of land as a factor of agricultural production is becoming less and less important. Moving away from the theory of land-centrism and more efficient use of owned property thanks to modern technologies is a challenge for the Polish legislator. Contemporary regulations, such as the Act on the formation of the agricultural system, clearly indicate the necessity of redefining the role of real estate in the development of Polish agriculture. Accurate measurement and implementation of appropriate sowing or plant protection measures will, in the long term, make it possible to set aside a large part of the land of low nutritional value. The challenge for the legislator will be to define the fallowing and reuse of this land.

*A de lege ferenda* postulate is the introduction of a law on precision agriculture. It must combine administrative aspects (real estate management, state aid), civil aspects (property boundaries, protection of business secrets), environmental aspects (use of permissible plant protection products), or finally labour and social security law (defining, for example, whether drone work is an agricultural activity). This new approach to agriculture, including the concept of Smart Village and agriculture 4.0, presents an opportunity for Polish farmers to develop and increase their profitability.

## CONCLUSIONS

The analysis presented above shows that modern technologies and the digitalisation era pose many challenges to both agricultural and labour law. These mainly concern the regulation of new working rules in agriculture with modern IT tools, as well as the implementation of new equipment.

In order to enable agriculture to function and increase its competitiveness, the Common Agricultural Policy supports innovation in agriculture, making it one of the determinants, along with climate protection, of the implementation of the new budget. Undoubtedly, the availability of finances, simplified legal procedures, and effective control of the funds spent will accelerate the intensification of efforts to make agriculture function in such a way as to respond to the digital challenges of the 21st century.

One of the identified challenges is the implementation and development of remote work in agriculture. The three basic farm types identified, while not exhaustive of all possible examples, show that the situation here is highly varied. While on medium and large farms that can afford to invest in innovation, remote work is possible and will certainly be developed, on small farms it will be limited, if introduced at all, to online applications for obtaining support from the Common Agricultural Policy. A solution is also required not only for the issue of protection of personal data of the persons working but also of the know-how of a farm mak-

ing use of, for example, the exclusive right to a plant variety or remotely planning the structure of crops. This requires new regulations combining agricultural and labour law, such as the Precision Farming Act, which has already been postulated *de lege ferenda* that would regulate, for example, the use of drones in agriculture or other autonomous devices.

Modern agricultural law and, by extension, labour law have not kept pace with the development of farming techniques and the farmers' need to acquire new methods of farming. The development of digitisation in agriculture and the consequent different approach to certain aspects of farm work requires not only financial incentives and public aid but, above all, appropriate legal regulations protecting the farmer from the negative effects of new technical solutions.

It seems indisputable that not all of the activities of an agricultural worker can be carried out remotely. Agriculture requires the presence of a farmer or agricultural worker for many activities, such as the operation of highly specialised machinery. The challenge, not only financially, but also logistically and then legally, will be to identify those places where this traditional farmer work can be replaced by digital solutions or technical devices. Relieving farmers of the burden of modern equipment, while providing high financial support, should foster the development of agriculture and then it will be possible to call it agriculture 4.0.

An exemplification of these challenges is the Smart Village concept, which is gaining in popularity. Where it is the farmers themselves who identify their needs, such as the fairly mundane internet access, and with the help of public funds try to implement them. The challenge for labour and agricultural law will be to develop legal instruments that can implement such complex concepts.

The lack of support for farmers and their reluctance to innovate may result in a change in their professional activity. Already today, statistics show a trend away from the farming profession, despite remaining in the countryside. Legal solutions will also have to be prepared for these people, which will enable them to work remotely in other professions while remaining in the countryside and using its infrastructure. This is facilitated by the professionalisation of the farming occupation, where the majority of aid from the European Union is directed at active farmers. Reconciling the move away from agriculture and its professional nature becomes a challenge for lawyers, who will have to identify possible legal instruments that will favour the reconciliation of the modern approach to professional work outside agriculture with that of the agricultural sector.

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