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It's All about Details. Why the Polish Land Policy Framework Fails to Manage Designation of Developable Land

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Abstract: Since the introduction of the current legal planning system, Polish land policy has failed to manage the designation of developable land. The oversupply of developable land designated in land-use plans and resulting from various weaknesses of auxiliary planning permissions undermines the creation of compact urban settlements. The article argues that, theoretically, the Polish legal framework of developable land designation management conforms with its more effective European counterparts. What makes it not work properly are the detailed regulations and their interpretation. In order to support this argument, the Polish land policy framework will be analysed and assessed by comparing it with the key common features of its German and Spanish counterparts.

Keywords: land policy; planning system; land-use planning; land development; urban development; legal framework; containment; Poland; Germany; Spain

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1. Introduction

Managing the designation of developable land is definitely one of the key tasks of land policy. The decision on which land may be developed has an impact on both the quality and efficiency of the settlement structure and the natural environment [1] (p. 211). The developable land designation management involves two main practical questions: *how much* land should be designated for development, and *where* should that land be located? While considering the issue of *how much* land should be assigned for development, everyone should agree that there should be neither too little nor too much land designated. A sufficient quantity of developable land is needed to provide various urban land uses such as housing, industrial, commercial development, public buildings, social and technical infrastructure, etc. On the other hand, an overestimated quantity of land for development threatens both qualities of urban patterns and the natural environment. If there is too much developable land, inconsistent and dispersed settlements may arise [2]. Such patchy, chaotic developments form invalid, unstructured urban patterns [3], [4] (p. 224), [5] (p. 91), [6]. A side effect of such an urban growth pattern is overconsumption of open land followed by a decrease of natural areas, arable and recreational land, forests, etc. [7] (p. 123), [8] (pp. 36–38), [9] (p. 16).

Excessive land development has been a serious problem worldwide [10]. Between 1990 and 2000, at least 275 ha of land was converted to built-up land in Europe per day [11], [12] (p. 186). The extent of residential areas in Europe has been growing disproportionately faster than the population (ca. 20% vs. ca. 6% between 1995 and 2015) [13] (p. 220). Uncurbed land consumption resulting in dispersed suburban development was observed in many European countries, especially in the 1990s (e.g., in Norway [12] (p. 186), [14], Spain [15] (p. 54), [13] (p. 238) and Eastern Germany [16] (p. 640)). Immoderate urban land expansion is a problem specifically in rapidly developing countries [12] (p. 186), [17], e.g., China [18] (p. 253), Iran [19] (p. 593), Turkey [19], (p. 594) [20] and Mexico, where land-use plans designated land for development that far exceeds predicted long-term needs [21] (p. 79). The pace of urban sprawl is notably great in Eastern Europe [22], [23] (p. 114).

Natural and farmland consumption due to unsustainable urban growth processes is a widely recognised research problem [12,24–32].

Bearing in mind the regrettable effects of allowing too much land to be developed [33], in many countries, *land thrift* [34,35] policies and instruments aimed at limiting land being built upon have been developed and adopted [36–38], [39] (p. 16). In Israel, agricultural land preservation was established as a national objective already in 1965 [39] (p. 18), [40,41]. Among various land thrift policies [23], the Norwegian Parliament established a national target to limit farmland conversion [12] (p. 186). In 2002, the German Strategy for Sustainable Development (*Nachhaltigkeitsstrategie*) [42] set an ambitious goal to reduce the daily amount of developed land from 129 ha to 30 ha by 2020 (30% target) [42] (s. E.VII), [43,44]. Now, the 0% target is advocated [34,45]. In 1956, the Spanish Land Act (*Ley de Suelo*) ordered that the general urban plan divides the stock of land into urban, to be urbanised and not to be urbanised. The same simple distinction still exists in the Spanish autonomous region of Valencia [46] (art. 28).

To reconcile the above-mentioned objectives of providing land for urban development with the objective of limiting land take, urban containment strategies evolved. The notion of *urban containment* [34] is based on the premise that urban growth should be contained in a limited area [34] in order to both decrease the quantity of built-up land and to produce compact urban nodes. The latter aim shifts our reasoning to the second question involved with the developable land designation management that is *where* the developable land ought to be designated.

The crucial question in that respect is how far from existing developments should the new developable land be allocated? An answer to this question impacts the density of urban settlements. The only thing we can be sure of is that urban structures, regardless of what scale they are looked at from, should be neither too concentrated nor too dispersed. The widely appreciated notion of *polycentricity* reflects the striving for the development of an expanded network of compact towns and cities. It involves a relative dispersion of settlements at the supra-regional and regional levels and concentration of settlements at the local level to form reasonably compact urban nodes of limited size. Compact cities, in contrast to sprawled [47], [48] (pp. 78–79), [33] (p. 89), [49], [50] (p. 142) and fragmented [51–53] (p. 118) ones are considered to be both efficient [23] (p. 119), [54] (p. 71) and effective in providing high-quality living environments [53] (p. 119) in an egalitarian way. However, some academics suggest that there may be significant welfare costs of urban compactness [55]. The polycentric approach to urban development attempts to balance economies [56], [57] (p. 69) and diseconomies of scale [58], [59] (pp. 65–72) that occur in urban patterns [57] (p. 69). Its advantages include qualities of urban, rural and natural environments [15], [60] (p. 115), [61].

The professional and academic discussion regarding how to better contain urban growth has been thriving for several years [34,62–65]. The question of *where* to designate developable land has been addressed by planning policies [38], [39] (p. 16), [66] in many countries around the world.

In England, the Kate Barker Review of Land Use Planning [67] coined the notion of *containment policy* aimed at increasing the efficiency of using the already urbanised land to protect the openness of rural areas [9] (p. 163). Among various measures to achieve this goal, the well-known *green belt policy* has been used as a tool for urban containment at least since 1955. Another important measure may be considered the *previously developed land policy* (PDL-Policy) [68] (s. 10, 38, 44), [69] (s. 2.3, 2.4, 2.51), [70] followed by the *sequential approach in site designation* [69] (s. 2.44), [71] (p. 210). The PDL-Policy established a preference to re-use the previously developed land (i.e., *brownfield*) over open land (i.e., *greenfield*) development. The policy was complemented by a measurable goal to allocate 60% of new housing developments on PDL (60% target) [72], [68] (s. 41). Similarly, as in England, in Valencia, there is a priority given to *brownfield* over *greenfield* development [46] (art. 7.2). There is a *sequential approach*-like policy in sites designation established, too, that gives a preference to the coherent development of existing urban areas [46] (art. 7.2).

In Germany, the *decentral concentration policy* (*dezentrale Konzentration*) aimed at deconcentrating the settlement at the national and regional levels and concentrating it at the local level had been implemented for many years. The policy of *land stock management* (*Flaechenhaushaltspolitik*) embraces both the questions of *where* and *how much* land should be allocated for development in order to strive for compact and land–economic settlement structures [73].

In 2005, the deconcentrated concentration policy was implemented in Israel [39] (p. 20), in particular, to resist low density, dispersed development. In recent decades, many countries introduced compact city policies [74,75]. For instance, Norway and Sweden entered a period of re-urbanisation [23] (p. 114). The Chinese Twelfth 5-Year Plan requires establishing boundaries of urban development, increasing densities of urban areas and limiting further expansion of mega-cities [18] (p. 260).

Nevertheless, there are countries where this issue has not been addressed in a consistent and effective way—e.g., Poland. Polish land-use planning designates vast quantities of developable land [2] (p. 5), [6] (p. 36) that are not possible to be utilised in a consistent manner to deliver well-planned urban structures [76] (p. 161). Instead, dispersed, suburban or semi-rural settlements that lack quality urban infrastructure are produced [2] (p. 5), [77]. In effect, sprawled development encroaches upon environmentally valuable open land [78] (p. 191), [79–82]. Due to a huge demand for investment areas [83], [84] (p. 169), extensive amounts of land are converted from natural or agricultural uses to settlement uses [83], [84] (p. 170), [85]. According to data retrieved in 2015 [86], this process was much faster in Poland than in other European countries [30] (p. 2240). As the problem is of great importance, a lot of research and papers have been produced on these issues that analyse the phenomenon from geographic [87–89], urban planning [9,90–94], sociological [88,95] and economic [6,96,97] points of view.

One can argue that the most prominent reason for the Polish sprawled urban growth pattern is the lack of proper management of the designation of land for development. Moreover, an even further-reaching thesis may be posed that the legal framework that governs this management was tailored to enable extensive, unplanned urban growth. As it will be argued in this paper, in theory, the Polish land policy framework is very similar to other continental frameworks. However, its detailed provisions, in contrast to its Western European counterparts, cause the Polish framework to foster overconsumption of open land and create dispersed urban development patterns. This is why it is worth examining foreign land policies to search for decisive differences that, in the case of model legal frameworks, allow them to better manage developable land designation to increase the rationality of the allocation of developments and to protect open land from expansive development.

There are three hypotheses of this research. The first one is that, in theory, the Polish legal framework of developable land designation management follows key features of two model frameworks—the German and Spanish frameworks (H1). The second and the third hypotheses say that due to a distortion of the original idea, the Polish legal framework of developable land designation management:

- In fact, does not conform to the key features of the two model frameworks (H2);
- Neither rationalises the allocation of settlements nor protects open land from expansive development (H3).

2. Aims, Scope and Methods

The aims of this research are:

- To identify key common features of the two model legal frameworks of developable land designation management (A1);
- To identify and structure the Polish legal framework of developable land designation management (A2);
- To compare the Polish framework with the key features of the two model frameworks (A3);

- To describe the problem of ineffectiveness of the Polish legal framework of developable land designation management (A4);
- To formulate recommendations for the Polish legal framework of developable land designation management (A5).

The model legal frameworks analysed are German and Spanish ones. They are examples of institutional toolsets adopted to counteract excessive consumption of greenfield land that in the past could be observed in both countries. Both frameworks are based on an official, clear distinction between land to be urbanised and not to be urbanised. They both share similarities with the Polish legal planning system as being founded on civil law. The German spatial planning framework has been the role model for the Polish one since its establishment after 1918. As Germany and Spain are federally organised countries with distinct elements of planning law in different autonomous regions or states, legal frameworks of Region Hannover in Lower Saxony and Comunidad Autonoma de Valencia—respectively—have been taken into account. All legal enactments identified as constituting the respective three frameworks of developable land designation management have been analysed (see reference list).

The substantial scope of this research is limited to ordinary urban development. It means that extraordinary development cases (e.g., infrastructure, special plants, agriculture or forestry-related buildings, etc.) have not been considered.

The research mainly consists of a qualitative institutional analysis of legal enactments (aims A1 and A2). Theses of the author are supported by empirical results of his own quantitative and qualitative research or literature (A4). Aim A3 required international comparative research. Basing on the results of the institutional, comparative and empirical research, some normative propositions have been formulated (A5).

The article is structured as follows. The next Section 3.1, analyses and describes two model frameworks for managing the designation of developable land. The German and Spanish frameworks have been identified, structured and then compared to indicate their key common features. Two graphic diagrams, one for each framework, have been produced. The aim of the next Section 3.2 is to present the basic presumptions of the Polish legal framework of developable land designation management. Section 3.3 analyses and discusses details of the respective Polish framework. The aim of this section is to state if and to what extent the Polish framework practically matches the key features of the two model counterparts indicated in Section 3.1. The outcome of this section is a graphic diagram of the identified Polish framework that follows the same pattern used to depict the complexity of the two model frameworks. In the fourth section, the results of the conducted research are discussed. Basing on conclusions of the research completed, key recommendations for reshaping the Polish legal framework were formulated in Section 5.

3. Results

3.1. Model Frameworks of Developable Land Designation Management

3.1.1. German Framework of Developable Land Designation Management

In Germany, the designation of developable land is regulated by all levels of land-use planning. The federal and state planning (*Raumordnung*) states general rules (*Grundsaetze der Raumordnung*) of urban development to be followed by lower-level planning bodies. Two main federal enactments regulating planning at distinct scales, namely, the Spatial Planning Act (*Raumodnungsgestz* (ROG)) [98] and the Building Code (*Baugesetzbuch* (BauGB)) [99] recognise the problem of overconsumption of open land for construction purposes. Minimising the quantity of open land consumed (*Inanspruchnahme der Freiflaechen*) for the purposes of settlement and transport, as well as the rule of using land in a thrifty way (*sparsame Flaechenutzung*), are embedded in the overarching Spatial Planning Act [98] (art. 2.2.6) and the Building Code that provides rules for urban planning at the local scale [99] (art. 1a.2, 9.1.3).

The most important regulations are assigned to subregional and municipal levels, including rules of admissibility of developments. The first step of designating devel-

opable land is linked to subregional (city-regional) spatial plans (*regionale Raumordnungsprogramme*[1]). These plans determine detailed planning objectives (*Ziele der Raumordnung*) that have to be consistent with upper levels general planning rules (*Grundsaetze der Raumordnung*), e.g., reducing the land take (*Verringerung der Flaecheninanspruchnahme*), concentration of development (*Konzentration der Siedlungstaetigkeit*) and orientating it on *central places* (*zentralle Orte*) [98] (art. 2.2.2). The settlement pattern advocated by the *central places policy* is based on a premise of focusing urban growth in selected urban nodes of sufficient size and qualities [100]. According to both regional (Lower Saxony) and subregional (Region Hannover)[2] plans, urban growth has to concentrate primarily in central places. Additionally, the subregional plan of Hannover Region assigns subsidiary urban development functions (e.g., housing) to some rural settlements that are intended to accommodate urban growth, too. Other villages are subject to *self-development* (*Eigenentwicklung*) [101] that assumes only 5% increase of the settlement area (*Siedlungsflaeche*) during the period of the subregional plan validity [102] (s. 2.1.4.03). Subregional plans set the city-regional settlement structure, greenbelts and other areas designated for preservation of open spaces [16] (p. 641), [103,104]. Detailed planning objectives set in the subregional plan have to be followed by local planning bodies that issue general land-use plans (*Flaechennutzungsplaene*).

The municipalities designate land for urban growth purposes in their general land-use plans. New areas foreseen for development, located on open land or on inconsistently developed areas (*outer areas* (*Aussenbereich*)) are assigned to the category of new development areas (*Neubaugebiete*) and become *expected development areas* (*Bauerwartungsland*). Generally, these areas must not be developed until a detailed, legally binding development plan (*Bebauungsplan*) is adopted. Thus, in Germany there is a general rule that new greenfield developable land is designated by legally binding plans. However, there are some minor exceptions from this rule that will be explained further.

Let us first introduce the crucial distinction between two categories of land: consistently developed areas (*inner areas* (*Innerbereich*)) and other areas (*outer areas* (*Aussenbereich*)). The *inner areas* are completely urbanised areas, i.e., consist of sufficient quantity and *Gewicht* (weight, importance) of interconnected buildings that are equipped with sufficient urban infrastructure. All remaining areas, that is open land, dispersed rural settlements and inconsistently urbanised settlement areas, are categorised as *outer areas*. The municipality sets boundaries of the *inner area* (*Innerbereich*) in a by-law [99] (art. 34.4.1). The aim of this distinction is to prevent scattered development (*Splittersiedlung*) on rural and suburban areas. In general, *inner areas* together with areas covered by detailed development plans are the only places where ordinary urban growth is admissible.

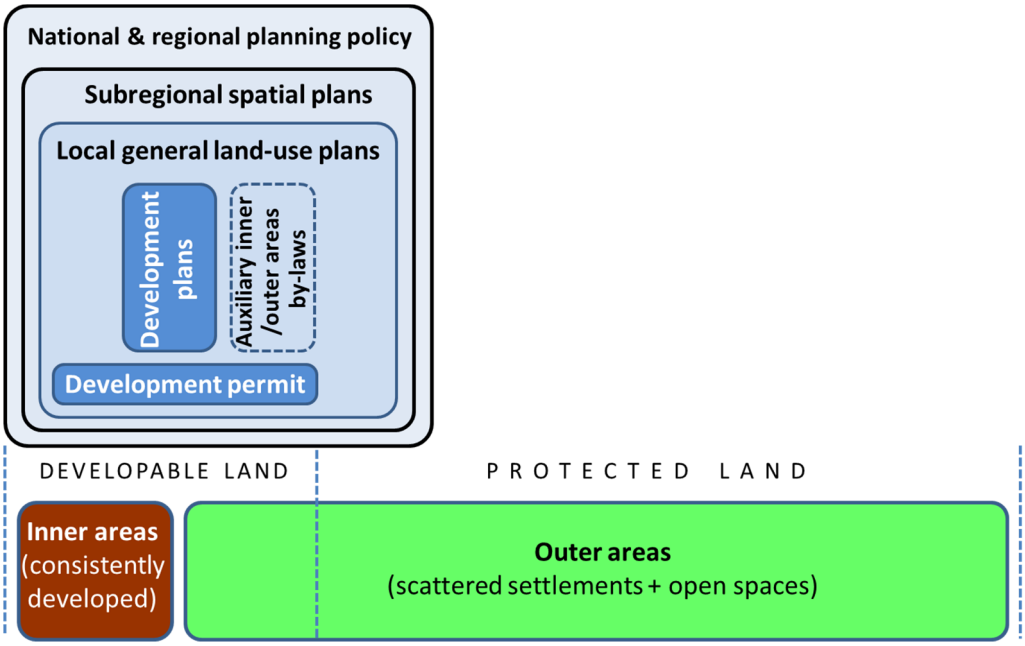
In the case of consistently developed areas a development is allowed if it fits into the surrounding built environment, following important features of developments and if the site is equipped with necessary technical infrastructure including a road[3].

Only extraordinary developments (e.g., agricultural or technical ones) are admissible on the *outer areas*. Any development has to follow provisions of the general land-use plan and should not create an increase in scattered development, nor reinforce or extend it [99] (art. 35.3.7).

The municipality may extend the boundaries of the *inner area* (*Innenbereich*) issuing one of the special by-laws called *Innenbereichsatzungen* that are treated as an alternative detailed development plan (*Ersatzplan*). They may create development rights that normally are absent on the *outer areas* (*Aussenbereich*) thus they are an exception from the general designation of new greenfield developable land in the detailed development plan (*Bebauungsplan*) only. Their advantages are simpler form and simpler procedure than in the case of the standard development plan. Among several types of such by-laws, the most important one from the point of view of the designation of developable land is the *development by-law* (*Entwicklungssatzung*) aimed at extending the *inner area*. It may be completed under two conditions—the development must be dense enough and the area must be designated in the general land-use plan as land for development (*Bauflaeche*).

Despite the general ban on developing *outer areas*, the municipality may issue another special by-law to enable extension of existing housing or small business development on *outer areas* without time consuming adoption of a detailed development plan. The *outer areas by-law* (*Aussenbereichsatzung*) may state that such development does not infringe the general local land-use plan and does not threaten to produce or extend scattered development [99] (art. 35.6). This instrument is controversial because it may be used to circumvent tough restrictions of developing *outer areas* [9] (p. 135). However, according to Greiving [105] this by-law requires an approval by a higher planning authority.

To sum up, there are two main land classes in Germany: consistently developed (urbanised) areas (i.e., *inner areas*) and other areas that consist of open land and scattered settlements (i.e., *outer areas*). The *outer areas* are generally protected from ordinary development. General local land-use plans indicate *inner areas* (precisely delimitated in municipal by-laws) and an extent of *outer areas* that may be subject to prospective urban development. There are two possibilities to urbanise such land: either issuing a detailed development plan or an auxiliary by-law. These instruments are not required to obtain the development permit on *inner areas*. Municipal general land-use plans have to follow concrete objectives of subregional spatial plans as well as national and regional planning policy (see Scheme 1).



Scheme 1. German legal framework of developable land designation management.

3.1.2. Spanish Framework of Developable Land Designation Management

There is no universal Spanish spatial planning system. The legal power to establish it belongs to autonomous regions. In the autonomous Community of Valencia the planning enactment is the *Ley de Ordenación del Territorio, Urbanismo y Paisaje, de la Comunitat Valenciana* [46]. However, the national legislation sets legal foundations of property rights in spatial management. Such enactment is the Land Act (*Ley de Suelo*) [106].

As there is no national spatial plan, the only significant planning policy is set by regional acts and strategies issued by autonomous regions, in accordance with their legislative power in the field of spatial planning. In the autonomous Community of Valencia the regional strategy is called *Estrategia Territorial de la Comunidad Valenciana* [107]. Along with the planning act it provides for planning policies in the autonomous Community of Valencia.

The planning policy is aimed at concentrating housing development in the network of cities, strengthening the polycentric urban pattern of the region, reaching compact urban structures, maintaining open spaces between them, including green belts, consolidating

and extending existing urban nodes and reusing vacant land [46] (art. 7.2.), [107] (s. 78.1). The land-use and urban planning must prefer compact urban patterns over scattered ones [46] (art. 7.2). To implement this rule, limits of residential density were increased from 75 to 100 units per ha [46] (art. 36.3). Creation of new isolated urban structures as well as monofunctional residential ones, especially in municipalities with a high share of discontinuous urban fabric, should be avoided [107] (s. 89). The planning policy strives at maintaining continuity of the open land network by demanding to provide for definite urban borders. Where feasible, there has to be a minimum of 500 m of open space left between each urban node to avoid a merging of settlement entities [46] (art. 7.2), [107] (s. 90). Priority is given to brownfield over greenfield development as well as to the extension of existing urban structures over the creation of new ones [46] (art. 7.2).

There are detailed guidelines for estimating the necessary land to be provided to respond to the demands on urban growth. The planning act [46] (art. 7.1) sets out that the supply of *urban land* (*suelo urbano*) and *land to be urbanised* (*suelo urbanizable*) has to reflect the real demand and refers to detailed rules of estimating it, established in the regional territorial strategy. According to them, the demand should be estimated based on demographic prognoses provided for each county (*comarca*) by the Statistical Office of Valencia. The strategy sets detailed mathematic formulas to calculate the demand for residential and commercial land within the period of a maximum of 20 years. The strategy enables an increase in the calculated demand by 25% maximum depending on local circumstances [107] (s. 86) and even more in case of listed specific cases in accordance with justified public interest (e.g., localisation of supra-municipal services, densifying low density towns, etc.). On the other hand, rural municipalities have to decrease the reference numbers of growth that derive from the accounts for the whole county by 0.5 in the case of residential needs and 0.6 in the case of employment [107] (s. 108.1). Estimating quantities and locations of the land designated for economic activities undergoes similar guidelines and framework of rules as in the case of the residential use.

Subregional spatial plans, i.e., *spatial action plans* (*planes de acción territorial*) in many places do not exist. If they do, they provide no co-ordination to and between general local plans. The *Plan de Acción Territorial del Área Metropolitana de Valencia* does not give any important guideline for local planning.

The Land Act (*Ley de Suelo*) [106] sets the basic categorisation of land as *rural* (*suelo rural*) or *urbanised* (*suelo urbanizado*) [106] (art. 21.1). According to the law *urbanised land* has to form an integral part of a settlement that is connected to networks of roads, services and parcels and be urbanised according to one of the planning instruments (*instrumento de ordenación*) or be sufficiently equipped with urban infrastructure according to legal requirements, or conform with requirements set by relevant planning instrument. All other land is considered to be *rural*, including *land planned to be urbanised* in land-use plans until *urbanisation activities* (*actividades de urbanización*) have been completed.

An important term in this respect is a notion of *urbanisation* (*urbanización*) defined by the *Ley de Suelo* as a transformation of a rural land into an *urbanised* one by forming one or more parcels suitable for development, equipped with the necessary infrastructure and services required by the spatial and urban planning [106] (art. 7.1.a.1).

The basic conditions of land (*rural* or *urbanised*) set by the Land Act are complemented by Valencian spatial planning law. Article 28 of the Spatial, Urban and Landscape Planning Act [46] indicates that planning instruments classify land as *urban land* (*suelo urbano*), *land to be urbanised* (*suelo urbanizable*) and *land not to be urbanised* (*suelo no urbanizable*). The default plan that classifies land is the general local structure plan (*plan general estructural*). In the region of Valencia, the general local structure plan designates three types of areas that correspond with these land classes: rural areas (*land not to be urbanised*), urbanised areas (*urban land*), areas of new development or urban expansion (*land to be urbanised*) [46] (art. 25).

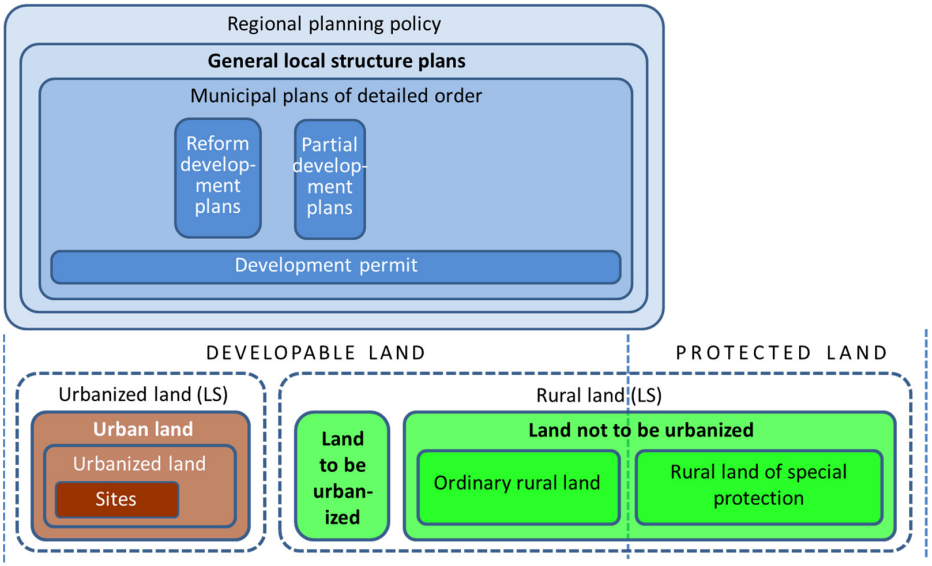
Land not to be urbanised consists of two subtypes: *ordinary rural land* and *rural land of special protection*. The *ordinary rural land* is protected by the general local structure plan via various regulations (e.g., minimal, indivisible surfaces of plots) from uncontrolled

subdivision and development. The *rural land of special protection* is additionally protected according to the provisions of sectoral legislation.

Urbanised areas are those equipped with urban services plus adjacent plots (one block of houses maximum) that may complement the existing urban tissue by small *urban development activities* (*actuaciones urbanísticas*) [46] (art. 25.2). An important notion that derives from the term of *urbanisation* is the *building plot* (*solar*). In line with art. 177 of [46], *solares* are urbanised and formed or legally subdivided parcels, suitable to be used in accordance with the provisions of the plan. The necessary services to have a status of *solar* are immediate access to public, paved road and walkway, waterworks, electric energy line and sewerage. There are two conditions of legal possibility to develop a parcel. Either it has the status of a *building plot* (thus is already urbanised), or it would be simultaneously urbanised and developed. Complete urban development (*urbanisatión*) is a necessary legal condition to make use of buildings [46] (art. 178.2).

The default way of developing the *land to be urbanised* (*suelo urbanizable*) is the *partial plan* (*plan parcial*) [46] (art. 40.1) aimed at structuring new urban expansion and consistently urbanise greenfield land [46] (art. 29.1.a). The equivalent of the *partial plan* envisaged for restructuring already urbanised areas is the *reform development plan* (*plan de reforma interior*) [46] (art. 29.1.b). Buildings on the *land not to be urbanised* have to follow a rural, touristic or extraordinary function. In exceptional cases, plans may allow building a house there if it is sufficiently isolated (minimal statutory requirements are a plot of a minimum of 1 ha per house and the built-up area is 2% of the plot maximum) [46] (art. 197.b) and conforms to relevant planning regulations [46] (art. 196.1) (in most cases, the *plan de ordenación pormenorizada* [46] (art. 35.1.d)). Ribbon development [46] (art. 196.3) as well as groups of houses [46] (art. 197.b.5) are prohibited.

To sum up, in the Spanish region of Valencia, it is possible to develop, in an ordinary way (e.g., housing), *urbanised land*, *land to be urbanised* and *ordinary rural land*. However, the urban expansion is only possible on the *land to be urbanised* (*suelo urbanizable*). The default way to do this is by issuing the *partial development plan* (*plan parcial*). Further development of the *urbanised land* (*suelo urbanizado*) is possible according to the *reform development plans* (*planes de reforma interior*) or, in the case of *building sites* (*solares*), without any plan. *Land not to be urbanised* (*suelo no urbanizable*) is protected from large scale urban development, but isolated housing development is possible. The categorisation of land is completed by the municipal general structure plan (*plan general structural*). All ordinary development activities along with detailed plans (*partial and reform development plans*) have to follow provisions of *plans of detailed order* (*planes de ordenación pormenorizada*) (see Scheme 2).



Scheme 2. Spanish legal framework of developable land designation management.

3.1.3. Key Common Features of the Two Model Frameworks

Based on the above descriptions, key features of the two analysed frameworks of developable land designation management may be indicated as follows:

- Supra-municipal guidelines for the developable land designation;
- General local plan that designates a reasonable amount of urban growth areas;
- Detailed development plan as a primary tool of greenfield land development;
- Urban development without a plan or a by-law only allowed in the case of infilling urbanised areas;
- Distinction between land to be urbanised and land not to be urbanised.

The first hypothesis of the following research is that the respective Polish legal framework theoretically shares these features (H1).

3.2. General Premises of the Polish Framework of Developable Land Designation Management

3.2.1. Supra-Municipal Guidelines for Developable Land Designation Management

The overarching Polish planning enactment is the Spatial Planning and Development Act [108]. It encompasses several legally binding principles that affect the policy of designating developable land in both distinguished aspects, i.e., *how much* land should be designated for development and *where* that land should be located. One of the issues to be considered in *spatial planning and development* (*planowanie i zagospodarowanie przestrzenne*) is the protection of forest and agricultural land [108] (art. 1.2.3). This principle implies a thrifty approach to the designation of greenfield developable land. There are more detailed guidelines for allocating settlements that affect the question of the location of developable land. The act requires that the planning should strive for allocating new developments on comprehensively urbanised areas[4] within boundaries of existing settlement entity, specifically by refilling existing urban fabric. Other lands may only be developed if such areas, suitable for a specific type of development, are lacking. Nevertheless, in such a situation, a priority is given to areas with the best access to technical infrastructure (transport, waterworks, sewerage, electricity, gas, heating and telecommunication networks) [108] (art. 1.4.4). These rules may be called a sequential approach in sites designation, similar to the English counterpart mentioned in the Introduction.

The act provides for a detailed procedure of estimating right amounts of land to be designated for urban growth in general local plans (*studia uwarunkowań i kierunków zagospodarowania przestrzennego*) (see the next section).

There is a framework of supra-municipal spatial plans and strategies that are to be followed by the local planning. The regional plan (*plan zagospodarowania przestrzennego województwa*) provides general guidelines for spatial management and indicates supra-local investments to be obligatorily included in local plans. For functional urban areas of provincial capital cities, a supplementary subregional plan may be issued as a part of the regional plan [108] (art. 39.6). Additionally, at the subregional level, there is an institution of the *strategy of supra-local development* (*strategia rozwoju ponadlokalnego*) [108] (art. 11.3) that may be issued by neighbouring municipalities and, if created, includes a *model of functional–spatial structure* (*model struktury funkcjonalno-przestrzennej*).

3.2.2. General Local Plan That Designates Reasonable Amount of Urban Growth Areas

When issuing the general local plan (*studium uwarunkowań i kierunków zagospodarowania przestrzennego*), the municipality has to follow detailed legal instructions on how to estimate the amount of land to be designated for urban growth. This estimation has to be completed on the basis of an account of demand and capabilities [108] (art. 10.5). The account consists of six steps. Firstly, a maximal municipal demand on new development (for each land-use function separately) should be estimated on the basis of economic, environmental and social analyses as well as demographic prognoses. Secondly, the absorbency of comprehensively urbanised areas[5] located within boundaries of settlement entities has to be estimated. In the third step, the absorbency of other areas designated for development in legally binding

detailed development plans (*miejscowe plany zagospodarowania przestrzennego*) is assessed. The fourth step is a comparison of the calculated maximal demand with the aggregated absorbency of the two mentioned kinds of areas. Only if the calculated demand exceeds the absorbency, the municipality is allowed to indicate new settlement land. The fifth step is an assessment of transport and social infrastructure needed to urbanise all areas already designated and eventually indicated for development. In the last step, the scope of necessary investments is compared with the financial potential of the municipality. If the investment needs exceed the financial capabilities, the demand is to be adjusted to the capabilities; thus, the whole procedure is to be repeated.

3.2.3. Detailed Development Plan as Primary Tool of Greenfield Land Development

There are two ordinary legal bases for issuing the *building permit* (*pozwolenie na budowę*) for constructing an ordinary building[6]. The default option is the legally binding detailed development plan (*miejscowy plan zagospodarowania przestrzennego* (MPZP)) [108] (art. 4.1). The second option is an auxiliary ad hoc planning permission (*decyzja o waunkach zabudowy i zagospodarowania terenu*)[7]. The latter was invented to enable development without the necessity of long-lasting and costly production of the detailed development plan. The original idea was to enable an infill development in already urbanised areas (see the next section). According to this premise, the only ordinary way to develop non-urbanised land should be by the adoption of a detailed development plan.

3.2.4. Urban Development without a Plan or a By-Law Only Allowed in the Case of Infilling Urbanised Areas

The general idea of the auxiliary instrument of ad hoc planning permission (DWZ) was to enable infill development on already urbanised areas. The requirements to issue this permission are:

- There is a neighbouring developed site;
- There is access to a public road;
- There is sufficient technical infrastructure (existing or planned);
- Consent of an authority to change the land status from agricultural or forest land to development land is not required [108] (art. 61).

This set of requirements, if literally interpreted, reflects the premise that the development to be allowed by the ad hoc planning permission (DWZ) has to take place in an urbanised area.

3.2.5. Distinction between Land to Be Urbanised and Land Not to Be Urbanised

In Poland, there is an official distinction between the following land classes:

- Agricultural land;
- Forest land;
- Developed and urbanised land;
- Ecological sites;
- Land under water bodies;
- Miscellaneous areas [109] (§ 67).

There is a general premise that the agricultural and forest land may be designated for development by a detailed development plan (MPZP). However, a change of the land status, in the case of some subclasses, requires the *consent* of a higher authority. Besides this generic premise, there are some cases in which agricultural and forest land may be developed without a plan.

The land classes supplement the above-mentioned requirements to issue the auxiliary planning permission (DWZ). If one of those requirements relates to the land class, and the general premise of the auxiliary planning permission is that it should only be issued to extend existing urbanised areas, one could assume that the only class of land allowed to be developed without a detailed development plan is the *developed and urbanised*

land class. Such land, by definition, fulfils the requirement that *consent* of an authority to change the land status from agricultural or forest one to development land is not required [108] (art. 61).

To conclude, all distinguished key common features of the analysed two foreign frameworks of the developable land designation management generally exist in the Polish legal framework. Therefore, it is sound to state that the first research hypothesis (H1) has been positively verified. However, as this statement deliberately bases on a general perception of the analysed framework, a detailed analysis of its specific provisions may shed new light on that issue.

3.3. Detailed Regulations, Their Assessment and Outcomes

3.3.1. Weakness of Supra-Municipal Guidelines for Developable Land Designation Management

The national guidelines provided by the planning act are legally binding requirements of *spatial planning and development* (see Section 3.2.1). They should be assessed as strong material regulations that clearly indicate objectives of the management of the designation of developable land that are in line with contemporary knowledge, current needs and the paradigm of sustainable development. However, the requirements are put into context by the art. 56 and 64.1 of the planning act [108]. According to them, not conforming with the statutory guidelines may not be the only reason to reject to issue the auxiliary planning permission (DWZ). It means that in the case of this planning permission which is the dominant basis of obtaining the building permit, these laudable guidelines have no real power and thus remain purely theoretical.

Another deficiency of the supra-municipal framework of land policy-making is a weakness of regional and subregional planning. The regional plan (*plan zagospodarowania województwa*) is a very weak tool (see [110] (pp. 77–101), [111] (p. 97), [112]). In practice, it does not provide any concrete provisions on the settlement structure to be strived for and no guidance on estimating allowable urban growth rates for each municipality[8]. These regional plans are made for whole provinces (normally NUTS 2 level). Supplementary city-regional plans may only be issued for functional areas of provincial capitals. As hitherto practice shows, even these city-regional plans are very general, too. Unlike their German counterparts, they do not assign settlement entities with specific functions (e.g., growth centre or rural settlement). Therefore, in practice, the regional plan may not be regarded as a real tool of developable land designation management.

As far as the subregional (city-regional) planning is concerned, the afore-mentioned supra-municipal strategy (see Section 3.2.1) is a new tool introduced in 2020; thus, it is still impossible to evaluate its relevance in the discussed field. However, its two deficits may already be indicated. Firstly, it is just a strategy, not a plan; hence, the level of accuracy of the *model of functional–spatial structure* might not be high enough to deliver real control on the rates of urban growth of municipalities. Secondly, adoption of the strategy is not obligatory. It may be assumed that most municipalities will not be willing to be bound by any external directions that would limit their land-use planning power.

3.3.2. Overestimated Urban Growth Areas in the General Local Plans

Strict rules of estimating municipal demand on settlement land delivered by the planning act are unquestionably a good step towards rationalising the developable land designation management. Nevertheless, some concerns regarding the details of these rules may be raised. The first one is related to the premise of estimating the *maximal* demand for settlement growth. It seems logical that if the *maximal* demand is calculated, any uncertainty of development processes, indicated by the legislator, may only produce a state that the maximal demand would not be attained. Consequently, taking into account this uncertainty as a ground for increasing the estimated demand by 30%, as the planning act allows [108] (art. 10.7.2), may be claimed a logical fault. It would not occur if, instead of the maximal demand, a most probable one was required to be estimated, such as in the region

of Valencia, where the demand is based on prognoses of the statistical office. Nevertheless, even in such a case, the possibility to increase the estimated demand by as much as 30% seems to be unjustified because of the aim of the regulations that is to decrease the current oversupply of developable land [6], [9] (p. 26).

The strict statutory rules of estimating the amount of urban land designated in the general local plans were introduced by the amendment of the planning act on 9 October 2015. Before that date, according to the research of Kowalewski et al.[2], the number of people that could settle on urban growth areas indicated in the general local plans was estimated as 167–229 million, while the population of Poland is ca. 38 million. There are rural municipalities located in metropolitan areas that plan for 70% of their area (Siechnice next to Wrocław, where the current percentage of urbanised land equals ca. 16% [113] (p. 128)). Lesznowola, located next to Warsaw, is well known for its policy aimed at extensive expansion of developments on farmland [114]. Only small pieces of greenfield (mostly natural) land were excluded from a designation for development [7] (p. 126). It is the lack of or unreliable estimations of demand for settlement areas that experts blame for this situation [2], comp. [115] (p. 331).

An illustrative example of the oversupply of land to be prospectively developable indicated in the general local plans[9] is a case study[10] on the Radom functional urban area (ROF)[11] and the municipality of Kowala[12].

The conducted research has shown that the relationship between newly prescribed and existing residential areas in the Radom functional urban area (ROF) accounts for 212%, but taking into account the suburban zone[13], 243%. The highest rate is in the municipality of Iłża, which indicates residential areas as large as 362% of the current residential areas. As far as the number of residents that could find a dwelling in there is concerned, an additional 167% (267,000) could settle in the suburban zone of the Radom functional urban area (ROF). It means that the whole city of Radom (ca. 212,000 inhabitants), and 55,000 people additionally, could move to the suburban municipalities. Meanwhile, in the years 1989–2019, only 23,938 people moved from Radom to the suburban zone of ROF [116]. By extrapolating the trend line, a total number of foreseen migration from Radom to other municipalities of ROF has been calculated as 14,503 persons within a perspective of 30 years[14]. The difference between the number of people that could settle on areas foreseen in analysed general plans in the suburban zone and the forecasted migration rate is more than 17-fold.

One of the leaders in stimulating the oversupply of developable land in the Radom functional urban area (ROF) is the municipality of Kowala that planned in its former general local plan [117][15] residential areas that could allow increasing the number of inhabitants 3.5 times (from ca. 12,000 to ca. 44,000). In 2020, Kowala adopted a new general plan [118], this time based on the new planning law. The new plan does not revise the overestimated amount of urban growth areas, although the number of inhabitants of the municipality is expected to only rise in the next 30 years by 5000 to reach 17,000. The new general local plan, theoretically made following the rigorous rules established in 2015 (described in Section 3.2.2), repeated the described oversupply of residential land.

The key to understanding the reason for this approach of the plan-makers seems to be their interpretation of the term *new development* as development that exceeds the prospective development foreseen on urban growth areas designated by the previous general plan[16]. In line with the enactment, however, the *new development* is any prospective development likely to occur in the municipality. Its estimated amount should derive from an account of the demand that is based on demographic and economic prognoses.

The interpretation applied by the plan-makers of the Kowala municipality makes mutually inconsistent (thus deprived of any sense) regulations of Article 10 Section 5 of the Spatial Planning and Development Act [108]. It seems that if the legislator defined the *new development* in the same way as these plan-makers, there would not be required any tedious accounting of the capacity of the comprehensively urbanised areas and development areas designated in the legally binding detailed development plans. They would just demand

to count the number of settlement areas designated in the previous general local plan and compare it with the estimated demand for new development. Multiplying provisions of previous plans by the general plans is considered by some academics to be extremely harmful and contradictory to the intention of the legislator [119], [120] (p. 77).

The amendment of the planning law in 2015 was aimed at changing the previous unregulated methods of making general local plans that led to the vast overestimation of land indicated for development. Legitimising old plans by new ones distorts that idea and makes adopted legal changes irrelevant. The conducted research has shown that the current statutory rules of estimating the quantities of developable land in the general local plans have not always been followed.

3.3.3. Detailed Development Plan as Secondary Tool of Greenfield Land Development

Although the ad hoc planning permission (*decyzja o warunkach zabudowy i zagospodarowania terenu* (DWZ)) should have been an auxiliary planning instrument, not undermining the primacy of the legally binding detailed development plan (MPZP) as the default way of approving and defining conditions of development, it became the main planning tool regulating urban development in Poland. In fact, most new buildings are authorised through this instrument (in 2012, ca. 80% of all buildings) [2] (p. 9). The general lack of detailed development plans is often blamed for this situation (31.2% of the country area was covered by these plans in 2019 [121]). However, the main reasons for this situation seem to be rather lenient rules of obtaining permission, depicted and explained further in Sections 3.3.4 and 3.3.5.

Besides the relatively weak position of the detailed development plan (MPZP), there is an issue whether or not the plan may be considered a tool for controlling the quantities of land designated for development. Theoretically, it allows designating both development and open land. Nonetheless, due to legal rules of compensating landowners who lose their development rights, it is quite costly for municipalities to designate non-developable areas. The ease of obtaining the ad hoc planning permission (DWZ) implies that almost everywhere next to existing settlement areas, there are some development rights associated with the real property. The problem is that the municipality, in the case of banning development in the plan, has to compensate landowners at the market value of their land that derives from any prospective development rights to be obtained via DWZ.

Additionally, as the detailed development plan must follow provisions of the general local plan, the extensive urban growth areas indicated in the general plans have to be translated into development rights if the legally binding detailed plan is issued. In effect, on all areas designated for development in legally binding detailed development plans (MPZP), 62 million people could settle [2]. There are rural municipalities located in metropolitan areas that designate for settlement purposes in their detailed development plans the majority of their areas. According to Topczewska and Maliszewski [122], [7] (p. 126), 62% of the rural municipality area of Lesznowola is formally designated as developable. The resulting oversupply of developable land designated in the detailed plans [6], [9] (p. 26) makes it impossible to urbanise and develop them in a consistent manner because it is unachievable to manage settlement processes that occur in so vast areas [2].

3.3.4. Common Development without the Detailed Development Plan

The requirements to issue the auxiliary ad hoc planning permission, described in Section 3.2.4, have been relativised by little details.

The first requirement—there is a neighbouring developed site—has been relativised by an interpretation of the term *neighbouring*. It may seem that *neighbouring* means *adjacent*, but it is not the case. According to some courts judgements, if there is a term of a *direct* neighbourhood, there ought to be an *indirect* neighbourhood distinguished, too [123]. A secondary law provides detailed instructions on how to assess whether there is a neighbouring developed site. The minimal area to be examined accounts for three times the width of the investment site but not less than 50 m. There is no maximal distance indicated.

Following the logic of jurisprudence, the neighbouring area may be very large. This logic undermines the premise of compactness as one of the features of quality urban patterns that could be infilled without a plan.

The second condition—access to a public road—is quite relative, too. No *direct* access to a public road is required to have the right to develop a site without a plan. The access may be via a private road (namely, an *internal road*) or a service road established on adjacent sites. According to jurisprudence [124–127], the term *access* should be interpreted widely. Both the accessed public road and the auxiliary ones do not have to be paved. They may just theoretically exist on a detailed development plan and cadastral map. This approach widens the scope of areas qualifying to development that may occur several hundred meters or even further away from a public paved road.

The third prerequisite—sufficient technical infrastructure—is relativised in the way that the infrastructure does not have to exist at the moment of issuing permission. It may be just planned, and it has to be affirmed by an administrator of a network that they are capable and willing to provide the necessary technical infrastructure. Additionally, there are no standards of required infrastructure necessary to obtain the planning permission. It is possible to obtain it in the case of sites lacking access to gas, waterworks and sewerage networks. Individual wells, septic tanks or domestic sewage treatment systems are allowed not only in the case of distant rural settlements but are common solutions in the case of suburban and sometimes even urban single-family housing as well. There are no preconditions for necessarily any service by non-technical urban infrastructure such as schools, recreational areas or greenery [77].

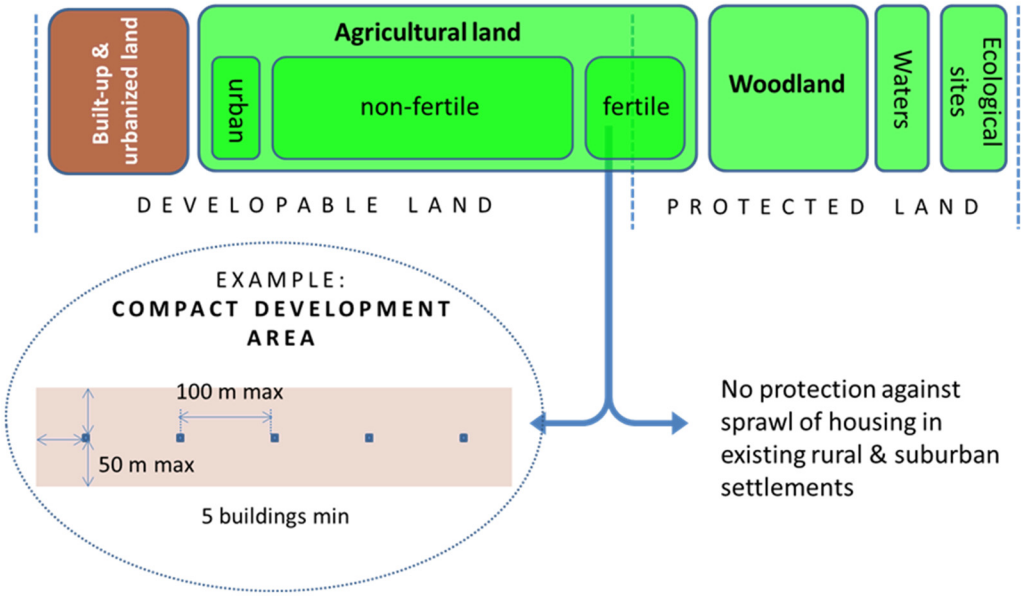
The last condition to obtain the ad hoc planning permission relates to the status of the land. The snag is the term *consent* of a higher authority to change the land status from agricultural or forest land to development land that must not be required to issue the planning permission. According to Article 7 of the Agricultural and Forest Land Protection Act [128], *consent* is not required in the case of the majority of rural land (it will be explained in detail in the next Section 3.3.5). Thus, the planning permission may be obtained even on agricultural land.

Additionally, the planning permissions do not have to follow provisions of the general local plans. Therefore, and because of the vague requirements described above, it is not possible to estimate the extent of land developable through this instrument. To sum up, in practice, it is possible to issue the planning permission for developments on open greenfield land, on inconsistently developed and non-urbanised areas that are lacking urban infrastructure [77,129]. The conclusion is that the instrument of the ad hoc planning permission (DWZ) cannot be considered as an effective tool of land policy. In line with this conclusion, the tool of DWZ is commonly perceived to be detrimental [111] (p. 97), [130] (p. 90), [131] (pp. 157–190).

3.3.5. Equivocal Distinction between Land to Be Urbanised and Land Not to Be Urbanised

As explained above (Sections 3.3.3 and 3.3.4), due to vague rules of obtaining the planning permission (DWZ), it is not possible to estimate the quantity of developable land in Poland. There is neither an official classification of land as *urbanised*, *to be urbanised* and *not to be urbanised*, nor a rule that the *land to be urbanised* is designated by the general local plans. The only classification of land is provided by the Agricultural and Forest Land Protection Act [128] (see Section 3.2.5). Among six classes of land, there is one definitely suitable for ordinary development (i.e., *developed and urbanised land*). However, it does not mean that other land classes must not be developed.

Scheme 3 shows in a schematic, simplified way the developability of distinct land classes.



Scheme 3. Polish land classes and their developability.

Land categories generally protected from development are ecological sites, water bodies, woodland and fertile agricultural land. However, plan-makers may obtain the consent of a higher authority to designate woodland in the detailed development plan for urban development. In the case of the agricultural land, besides the same possibility to reclassify the land to urban use in the legally binding plan (MPZP), there are some possibilities to develop it via ad hoc planning permission (DWZ). The key precondition is whether the *consent* of a higher authority is required or not.

The consent is required to reclassify all woodland and the most fertile agricultural land (subclasses I-III) [128] (art. 7.2). However, there are some exceptions in the latter case. The consent is not required if the respective land satisfies the following conditions[17]:

- At least a half of it is located in *compact development areas*;
- It is located not further than 50 m from a developed site;
- It is located not further away than 50 m from a public road;
- Its area does not exceed 0.5 ha [128] (art. 7.2a).

To estimate the extent of areas that satisfy these requirements, a definition of *compact development areas* is of crucial significance. Such areas are a minimum of five non-auxiliary buildings spaced not more than 100 m from each other plus 50 m envelope [128] (art. 4.30, 4.29) (see Scheme 3). Additionally, there is no consent required in the case of agricultural land located within administrative boundaries of towns and cities, regardless of whether the land is fertile or non-fertile.

If the consent of a higher authority is required to reclassify the agricultural land, plan-makers must obtain it before the adoption of the detailed development plan (MPZP). If no consent is required, auxiliary planning permission (DWZ) may be issued. Along with all agricultural land located within cities' and towns' boundaries, and the non-fertile land, the option to reclassify fertile agricultural land relativises the protection of rural land from an expansion of ordinary developments. Besides that, there are financial incentives for housing development in agricultural areas. Normally, in order to exclude land from agricultural or forest use, which is a requirement to obtain the building permit [128] (art. 12a), the investor has to pay a fee [84] (p. 170). However, in the case of residential developments, if the area of land does not exceed 500 m^2 (one-family housing) or 200 m^2 (for each unit in multi-family housing), no payment is involved.

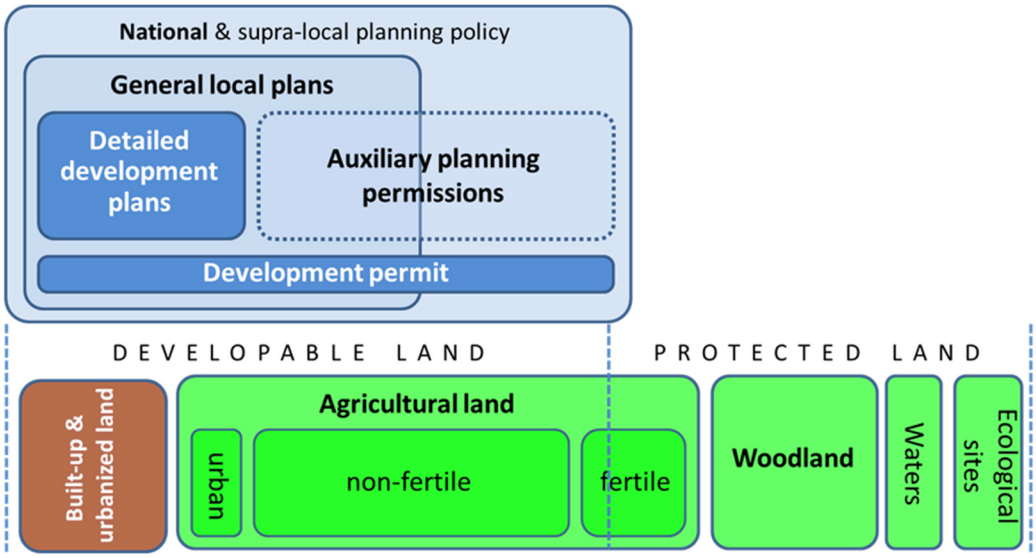
According to estimations, the total amount of agricultural and forest land in which the class was changed to the *developed and urbanised* one by provisions of legally binding development plans (MPZP) has accounted for ca. 600,000 ha since 2003, which is 1.9% of

the country area [132]. In comparison to the number of residential areas, which accounted for 1.1% of the total country area in 2017, the reclassified area is almost twice as large [132] (p. 28). Moreover, it is worth stressing that this number does not reflect the total scope of the phenomenon as it does not include the amount of rural land converted to developed land due to consumed planning permissions (DWZ).

The problem of extensive reclassification of agricultural and forest land for urban purposes raises serious concerns that are reflected in research and articles produced on this topic [133,134]. The problem is especially severe in suburban areas, and the rural land is consumed mainly for residential purposes [134]. In 2016, 24% of developments were carried out, and 23% were planned outside of *developed and urbanised areas*, mainly on agricultural land [78] (p. 168). Practitioners in land-use planning confirm that private investors push for reclassifying agricultural land by issuing a development plan [135] (p. 337).

Vast amounts of land reclassified from the *agricultural* or *forest* land classes to *developed or urbanised* one indicate that the land classification may not be considered a proper tool to effectively manage the designation of developable land.

To sum up, the *development permit* (*pozwolenie na budowę*) may be obtained on the basis of the detailed development plan (MPZP) or by the auxiliary planning permission (DWZ). Provisions of the detailed development plan have to follow the guidance of the general local plan. Auxiliary planning permissions do not have to conform to it. However, both documents have to follow national and regional planning policies. The regional planning guidance is weak, whereas the national planning act regulates in detail the issuing of both land-use plans at the local level and auxiliary planning permissions. Detailed development plans may be issued for all classes of land and may make them developable (except for land protected on the basis of other enactments) (the diagram does not depict it). Auxiliary planning permissions may be issued only for areas not covered by the detailed development plan. It is possible to obtain permissions on urbanised land, agricultural land located within boundaries of urban municipalities, non-fertile agricultural land and, if some conditions are fulfilled (see Scheme 3), on fertile land, too (see Scheme 4).



Scheme 4. Polish legal framework of developable land designation management.

4. Conclusions and Discussion

Table 1 depicts the most important features of the three investigated frameworks of developable land designation management.

Table 1. The comparison of the key features of the investigated frameworks of developable land designation management.

Key Features of the Model Frameworks	Germany	Spain	Poland	
			Theory	**Practice**
Supra-municipal guidelines for the developable land designation	Statutory principles in the federal spatial planning act	Statutory principles in the autonomous region's spatial planning act	Statutory principles in the national spatial planning act	Relativised by the planning act
	Statutory principles and binding objectives in the state spatial plan	Planning guidelines in the autonomous region's spatial strategy	Planning guidelines in the regional spatial plan	Very general
	Legally binding objectives in the subregional plan	Planning guidelines in the subregional plan, very general	Planning guidelines in the subregional plan	The subregional plan is not obligatory, for selected cities only and very general
	Inter-municipal general local plan, not obligatory	Inter-municipal general local plan, not obligatory	Supra-municipal strategy	The supra-municipal strategy is not obligatory
General local plan that designates reasonable amount of urban growth areas	Municipal growth rates follow subregional objectives	Detailed statutory guidelines on estimating urban growth rates, accounts made by the municipality	Detailed statutory guidelines on estimating urban growth rates, accounts made by the municipality	Assumed growth rates may by far exceed the most probable amounts
Detailed development plan as primary tool of greenfield land development	Detailed development plan is the default tool of greenfield urban development	Detailed development plan is the default tool of greenfield urban development	Detailed development plan is the default tool of greenfield urban development	Majority of developments are legitimised by the auxiliary planning permissions
	Out-of-plan greenfield urban development requires a municipal by-law			Greenfield urban development located on rural land lacking infrastructure is possible without the detailed development plan
Urban development without a plan or a by-law only allowed in the case of infilling urbanised areas	Urban development without a plan or a special by-law is allowed only in the case of infilling comprehensively urbanised areas	Urban development without a plan is allowed in the case of comprehensively urbanised areas only	Urban development without a plan is allowed in the case of infilling urbanised areas only	
Distinction between land to be urbanised and land not to be urbanised	Land classes embedded in the planning framework: urbanised areas, areas to be urbanised by detailed development plans, areas not to be urbanised	Land classes embedded in the planning framework: urbanised land, land to be urbanised, land not to be urbanised	Key land classes distinction: developed and urbanised land vs. agricultural and forest land	It is allowed to develop non-fertile agricultural land. Fertile land may be developed in line with some restrictions
	Urban development on the land not to be urbanised allowed by issuing a by-law	Isolated rural housing is allowable on the land not to be urbanised		

As it can be seen in Table 1 and as was evidenced in Section 3.2, theoretically, the Polish legal framework of developable land designation management shares key features with analysed model German and Spanish frameworks (H1). Therefore, it can be assumed

that the first hypothesis of this paper has been positively verified. However, when looking into details of the analysed Polish land policy system (Section 3.3), one can conclude that because of the distortion of original ideas, in practice, the Polish legal framework of developable land designation management does not conform to identified key features of the model legal frameworks (H2). Presented research on the outcomes of the Polish land policy supports the further conclusion that it neither rationalises the allocation of settlement nor protects open land from expansive development (H3). It seems reasonable, therefore, to assume that the second (H2) and third (H3) hypotheses of this article have been positively verified, too.

Key similarities and differences between the three analysed frameworks, along with their implications for the Polish land policy framework, will be further discussed.

Theoretically, supra-municipal guidelines for the developable land designation are present in all of the three frameworks. All of them are regulated by statutory principles fixed in respective enactments that express striving for the protection of greenfield land and urban containment. The Polish planning act, however, puts them into context, stating that not conforming to the statutory guidelines may not be the only reason to reject to issue the auxiliary planning permission, which is the most common way to obtain the development permit. Additionally, lacking effective implementation by proper planning and land management tools, the statutory guidance on a sustainable land policy does not bring any significant results. The role model for it can be the strict German rules of focusing growth in central places. This general principle, embedded in the German Spatial Planning Act (ROG), is implemented by hierarchically subsequent regional and subregional plans. The central places system is considered to be extremely effective in controlling and managing urban development [16] (p. 649).

Both German federal states and Spanish autonomous regions dispose of strong regional level plans or strategies that include planning policies to control the designation of developable land. In contrast to them, the Polish regional plan is a weak tool unsuitable to effectively manage urban growth processes inside the region (see Table 1). Nevertheless, the most prominent deficiency of the Polish supra-municipal planning framework is the practical lack of plans at the functional city-region level that should manage the allocation of settlement in line with the comprehensive land policy of the entire city region. In Poland, subregional plans are not obligatory and may only be issued for functional urban areas of provincial capitals. Even if produced, usually, they are not specific. These deficiencies of the Polish framework are shared with the Spanish one (see Table 1). In contrast to them, the analysed subregional planning of the Hannover Region, which disposes of prerogatives of issuing legally binding regulations, may serve as a role model.

The need to regulate urban growth processes at the city-regional level is advocated by academics and planners both in Poland [30] (p. 2247) and in other countries, too [13] (p. 240), [16] (p. 639), [136] (p. 52). The city-regional scale of planning is considered to be the most appropriate governance level to avoid harmful inter-jurisdictional competition [137], see [138] (p. 23) and to curb self-oriented municipal planning that otherwise can produce negative spillover effects affecting adjacent municipalities and the city region as a whole [16] (p. 639). However, in order to effectively avoid undesirable downscaling urban governance [23] (p. 134), [139], the planning at the city-regional scale should follow a top–down model (see [16] (p. 652)). In line with these arguments, municipal growth rates in Hannover Region have to follow subregional objectives, whereas, both Spanish and Polish frameworks assign the municipalities with the prerogative to estimate them independently (see Table 1). However, in the case of Valencia region, the estimations have to be based on real demographic prognoses, while in Poland, relevant statutory regulations may be considered as inconsistent and enable assuming excessive municipal growth rates.

Polish municipalities strive for their own economic development, hence profile their vague demographic prognoses and assess their needs in line with a principle of everlasting growth. Every new inhabitant and business brings additional tax revenues to the municipal budget [88]. Nevertheless, as evidenced, such planning, in the long run, implies

extensive expenditures on infrastructure [2], [7] (p. 123) and threatens the quality of the local urban pattern. Still, this short-sighted approach is not unique to Poland but is noticed in Spain as well [13] (p. 221), [140]. Jędraszko [135] (p. 73) described this problem as a symptom of an *absolutisation of municipal sovereignty* that, in the case of Poland, went further than in the majority of EU countries. Based on the results of the conducted research, it seems to be sufficiently justified to pose a thesis that one of the factual aims of the post-Communist Polish spatial planning system has been an absolutisation of planning sovereignty of municipalities that enables them to permit and promote unrestrained urban growth. After the 44-year period of the Communist regime, associated with restrictive top–down planning, Polish society perceived democracy and capitalism as unrestricted freedom based on the free market principle. Since the administrative reform in 1990, the municipality has been considered as an emanation of democracy and bottom-up governance. However, this controversial aim of the spatial planning system could not be openly articulated because of the paradigmatic foundations of the Polish spatial planning, expressed in the planning act, that are spatial order and sustainable development [108] (art. 1.1).

Theoretically, two main local planning instruments—the general local plan (*studium uwarunkowań i kierunków zagospodarowania przestrzennego*) and the detailed development plan (*miejscowy plan zagospodarowania przestrzennego* (MPZP))—should be aimed at rationalising the allocation of settlement and the protection of open land from expansive development. In practice, however, they became tools of the planned expansion of settlements. Instead of preventing diffusion of dispersed urban patterns and safeguarding open land for the sake of far-reaching public interest, both instruments are used to stimulate unsustainable peri-urban growth [2] (pp. 6–7) for the benefit of particular interests of landowners and investors [88].

The ongoing discussion on the optimal level of the general local plan's intervention in the development rights [120] (p. 77), [141] and protection of nature [120] (p. 77), [142–144] denotes its intrinsic deficient legal construction. The Polish general local plan is considered to be an ineffective instrument in terms of providing for sustainable spatial development [145] and implementing planning policy [120] (pp. 89–90). Vast settlement areas designated in detailed development plans imply high municipal financial commitments of acquiring land for public purposes. For instance, in the municipality of Lesznowola, they tenfold exceed its annual budget [7] (p. 123), [146].

In all investigated land policy frameworks, the detailed development plan is the default tool of greenfield urban development (see Table 1). In Germany, it is the *development plan* (*Babauungsplan*) that is the default legal basis of urban expansion. However, it is possible to enable ordinary greenfield development (e.g., housing) without the legally binding development plan by issuing a special municipal by-law. In Spain, the only legal way of urban expansion is issuing the *partial development plan* (*plan parcial*), which is envisaged for comprehensive urbanisation of the *land to be urbanised*. Nevertheless, housing development is allowed on the *land not to be urbanised*, too. However, it has to be sufficiently isolated from each other and follow requirements of the municipal *plan of detailed order* (*plan de ordenación pormenorizada*). Therefore, such kind of land development cannot be considered unplanned urban expansion. In contrast, the Polish instrument of ad hoc auxiliary planning permission (*decyzja o warunkach zabudowy*) allows both dispersed and dense urban development in both urban and rural areas. Therefore, the tool of the auxiliary ad hoc planning permission (DWZ) is the most questionable Polish planning instrument [111] (p. 97), [130] (p. 90), [131] (pp. 157–190) that may be blamed for the majority of the current amount of developable land. Furthermore, this instrument makes it impossible to assess the total amount of developable land. Due to the nuances of respective legal regulations and their debatable judicial interpretation, an indefinable quantity of land may be deemed developable upon a request by potential investors that apply for the ad hoc planning permission (DWZ).

However, there are some aspects that differentiate the evaluation of the instruments of the auxiliary planning permission (DWZ) and the two local land-use plans (the general and the detailed ones). The ad hoc planning permission (DWZ), as actually legally constructed, is malicious per se. In contrast, the detailed development plan (MPZP) and the general local plan are suitable tools to properly manage the designation of developable land. The problem is that they have the potential to damage the land-use pattern, too. The practical problem with them seems to be twofold. Firstly, there is no political will to use them properly. A lucrative possibility to change the land use from agricultural or forest ones to development one is too tempting to landowners and politicians [7] (p. 122), [88]. Secondly, restricting the developability of land is costly to municipalities. Due to costly compensation requirements [77] that cannot be rewarded by increments from planned urbanisation initiated by municipalities, they are reluctant to adopt and implement a strong land policy. The imbalance of losses and profits that derive from urban planning [77] makes municipalities passively react to initiatives of private developers [7] (p. 121), [147], in line with principles of avoiding immediate problems and minimising direct costs.

Whereas in Europe, municipalities actively manage development processes—prepare investment land, regenerate neglected areas, etc.—in Poland, authorities are passive. Habitually, the initiative belongs to private investors that just *obtain the change of land status for developable and consent to develop it* [53] (p. 77).

Probably the most prominent reason why the Polish system of protecting rural areas from urban development does not function properly is a lack of clear division of the land stock into three land classes: *urbanised land*, *land to be urbanised* and *land not to be urbanised*. In Poland, instead, there are separate regulations aimed at protecting agricultural and forest land. As evidenced, this protection does not work well. The legal framework practically does not protect non-fertile agricultural land from development. The fertile land is not protected either from housing development to be located in urban municipalities or within the boundaries of so-called *compact development areas* that have been defined in a ridiculous way from the point of view of containment policies.

The protection of the land class *not to be urbanised* is not perfect in the investigated foreign legal frameworks either (see Table 1). However, their approach is very different to the Polish one. The German framework enables encroaching the *outer areas* only by issuing a special municipal by-law. Admittedly, the Spanish regulations allow encroaching the *land not to be urbanised* by housing development, but they set a *minimum* surface of a plot per house. Although this approach may cause detrimental dispersion of developments over the countryside, it does not allow dense or large scale urban development there, as it is common in the Polish case. The Polish rural land protection framework, setting *maximum* surfaces standards per development, incentivises relatively dense housing development on agricultural land.

Bearing in mind all presented arguments, it seems to be justified to pose the second summarising thesis, that the Polish land policy framework was tailored to enable lucrative conversion of agricultural land into development land.

Depicted aspects of mismanagement of developable land designation reflect a more general problem of perceiving real property rights. Land-use planning is generally not popular in Poland as it is seen as an obstacle in the development process. It is perceived as an incursion in *the holy property right* (*święte prawo własności*) (see [148]). According to the Polish Constitution, *the property may be limited by means of a statute only and only within a scope that does not infringe the essence of the property right* [149] (art. 64.3). Does it imply that the property right is protected to a greater extent than other values? On the one hand, this provision entitles the parliament to limit property rights by issuing enactments. Such an example is the Spatial Planning and Development Act that, in fact, restricts rights to make use of real property. On the other hand, however, it is not easy to determine what is *the essence of real property rights*. For sure, development rights are limited by the planning law. Nevertheless, in Poland, the development right is perceived as a default attribute of real property. The *freedom of development* (*wolność budowlana*) [150], [151] (p. 65) seems to

reflect the overriding approach of the Polish society to the urban planning issues that has prevailed since the fall of Communism in 1989. The objective of the spatial economy ever since has been to foster urban growth as a factor of economic development, regardless of where it occurs and how it looks. This research and reasoning make it justified then to state that the Polish post-Communist land policy has been characterised by an absolutisation of the real property right [135] (p. 73) that has been equated with the development right [148]. The paradigm of *development freedom* applies even at the expense of irrational land-use patterns (see [7] (p. 123), [111] (p. 97), [150] (pp. 1–10)).

In contrast to the described Polish situation, in Spain, the right to develop a real property is created by regulations of land-use plans. Additionally, according to the Land Act [106] (art. 11.2), the developability of a plot, if assigned by land-use planning, is not considered a property right. The right to develop the land depends on the fulfilment of obligations imposed on the landowner by the land-use and urban planning.

Although none of the investigated legal frameworks is perfect, the German and Spanish examples may be considered attempts to create clear institutional frameworks of developable land designation management. However, as the conducted research has shown, detailed regulations and their interpretation may significantly change the system's performance. This research was focused on the Polish framework. Further research is needed to assess outcomes and nuances of the German and Spanish as well as other land policy systems in a similar way.

5. Recommendations

On the basis of the conducted research, some recommendations for the Polish land policy framework may be formulated. They follow the examined models of Germany (Region Hannover) and Spain (Comunidad Valenciana). The first recommendation is based specifically on the German example: it is the subregional planning that should define the quantity of developable land for each municipality. The subregional level is deemed to be the functional city-region that encompasses an urban node (the city), suburban area and rural areas functionally bound with the urban agglomeration [135] (p. 269)[18]. The city-regional planning level is low enough to grasp, thoroughly consider and effectively manage all significant spatial phenomena that occur in and around a big city. On the other hand, it is high enough to avoid involvement in particularities that happen at the municipal level and hinder proper comprehensive land-use planning. Instead of estimating the prospective demand for housing and commercial development by municipalities themselves, growth allowances balanced at the city-regional level ought to be assigned to each municipality according to its supra-municipal function.

The second recommendation is that land classes should be embedded in the spatial planning system. The current distinction between urbanised land and various classes of rural land is separate from the core Polish planning framework. Besides, the rural land classes do not imply protection from urban development. Based on the analysed foreign experience, one can conclude that there should be unequivocal classes of *urbanised land*, *land to be urbanised* and *land not to be urbanised*. This classification should be tailored to protect rural land from urban growth. Additionally, concentrating urban growth on clearly indicated areas would significantly help to obtain rational settlement patterns. The land classes should be assigned in general local plans.

Both model frameworks agree that the *urbanised land* has to be adequately equipped with all necessary urban infrastructure. Additionally, in line with the German concept of *inner areas* (*Innenbereich*), it is recommended that the *urbanised land* has to be consistently developed in terms of density, form and layout of buildings. It is especially important in Polish circumstances, where inconsistently semi-urbanised areas are widespread and require comprehensive restructuring. Such a definition of *urbanised land* makes it suitable to continue its development without the necessity of plan adoption. Subsequently, development without a plan should be permissible only in the case of consistently urbanised

land. Only such an approach would allow for stopping the present extension of chaotically developed areas.

A logical consequence of the last recommended rule is that the *land to be urbanised* should become developable only by regulations of the detailed development plan. Following such a rule, urban extension or infilling of inconsistently developed areas would be possible only if there is a development plan that allows it.

In contrast to the current Polish regulations, complete urbanisation should be regarded as a prerequisite for ordinary land development. In both of the countries referred to, the necessary infrastructure must exist before completion or the occupation of the buildings. If a provision of all mandatory infrastructure was a requirement to develop land, the quantity of developable land would decrease, and its location would be more rational. Such a precondition may thus be considered one of the tools of developable land designation management.

All recommended regulations would help to implement a land policy that attempts to correctly respond to the two key planning questions: *how much* and *where* should developable land be designated? Consequently, the recommended regulations would directly or indirectly assist to rationalise the allocation of settlements and to protect open land from expansive development.

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Notes

1 Names of planning documents used in different federal states slightly vary. The default names used in this article are taken from Lower Saxony and Region Hannover. In other federal states (*Laender*), these plans are usually called *Regionale Raumordnungsplaene.*

2 The German terminology of spatial plans has been translated as follows: the federal state spatial plan (*Landesraumordnungsprogramm*)—regional spatial plan, the city-regional spatial plan (*Regionales-Raumordnungsprogramm*)—subregional plan, *Flaechennutzungsplan*—local general land-use plan, *Bebauungsplan*—detailed development plan.

3 Additionally, the new development may not negatively impact the townscape and must guarantee healthy living conditions [99] (art. 34.1).

4 The exact term used: *areas of fully developed compact functional–spatial structure* (*obszary o w pełni wykształconej zwartej strukturze funkcjonalno-przestrzennej*) [108] (art. 1.4.4).

5 *Areas of fully developed compact functional–spatial structure* (*obszary o w pełni wykształconej zwartej strukturze funkcjonalno-przestrzennej*).

6 Extraordinary cases of admissibility of specific kinds of buildings on the basis of special enactments have not been considered.

7 There are two types of this planning permission: permission for public purposes investments (*decyzja o lokalizacji inwestycji celu publicznego*) and a permission for other developments (*decyzja o warunkach zabudowy*) (DWZ) [108] (art. 4.2). Legal conditions to issue both of them are very similar. As the latter is the one to be issued in the case of private development that constitutes the majority of cases, the ad hoc planning permission will be further referred to as *decyzja o warunkach zabudowy* (DWZ).

8 On the weakness of the Regional Development Plan of Mazovia Province (*Plan zagospodarowania przestrzennego województwa mazowieckiego*), see [112].

9 Provisions of the general local plan (*studium uwarunkowań i kierunków zagospodarowania przestrzennego*) become binding in case of adoption of the legally binding detailed development plan (*miejscowy plan zagospodarowania przestrzennego* (MPZP)).

10 The amounts of settlement land were estimated on the basis of municipal general local plans that were in force in 2019. All of them were adopted before the 2015 legal amendments, when strict rules of designating urban growth areas in general local plans were introduced.

11 The amounts of settlement land were estimated on the basis of municipal general local plans that were in force in 2019. All of them were adopted before the 2015 legal amendments, when strict rules of designating urban growth areas in general local plans were introduced.

12 Kowala is a rural municipality in the Radom functional urban area, neighbouring the city of Radom from the south. It undergoes extensive suburban growth processes.

13 The suburban zone is the area of ROF, excluding the core city of Radom.

[14] Due to the poor economic situation, the overall population of the Radom functional urban area (ROF) has not been growing recently. That is why only migrations from the core city to the suburbs have been taken into account. It has been assumed that the potential number of people moving into the suburban zone of ROF from outside of Radom would equalise the number of people migrating from there outside ROF.

[15] This plan was adopted before the amendment of the planning act that introduced strict rules for estimating the number of urban growth areas [117].

[16] The plan-makers refer to a letter of the Ministry of Infrastructure and Construction from 28th April 2016 that contains such an interpretation.

[17] The description of these conditions was slightly simplified to make it easier to comprehend.

[18] Region Hannover is considered to be one of the best innovative examples of planning organisations at that level [9] (pp. 114–115).

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