Land Development in Flanders in a Changing Perspective

Frans Pauwels

Summary
Flanders is a highly urbanised region in northwestern Europe. In the sixties, land development started with traditional land consolidation and evolved to integrated land development. Characteristics and available capacity of the actual instruments are described. As Flanders is transforming into an urban network society where everybody is claiming the remaining rural or "rurban" areas, and with a new climate, more Europe and less government, integrated land development is facing many challenges. In collaboration with public and private partners, and following an area-oriented approach, a powerful and flexible land development toolbox should be able to create multifunctional, productive landscapes with a high quality of place.

Zusammenfassung
Flandern ist eine stark urbanisierte Region im Nordwesten von Europa. Die Landentwicklung begann hier in den 1960er Jahren mit der traditionellen Flurbereinigung und entwickelte sich zu einer integralen Landentwicklung. Regionale Besonderheiten und Kennzahlen zur Leistungsfähigkeit der gegenwärtigen Instrumente werden beschrieben. Da sich Flandern zu einer städtischen Gesellschaft wandelt, in der jeder Ansprüche an den ländlichen Raum und die peri-urbanen Bereiche hat, erfährt die Landentwicklung zurzeit neue Herausforderungen; weitere Herausforderungen kommen durch den Klimawandel, die europäische Integration sowie den Ruf nach "weniger Bürokratie". In Zusammenarbeit mit öffentlichen und privaten Partnern und mit einem gebietsorientierten Ansatz werden kraftvolle und flexible Instrumente benötigt, mit denen man in der Lage ist, eine multifunktionale produktive Landschaft mit hoher Standortqualität zu schaffen.

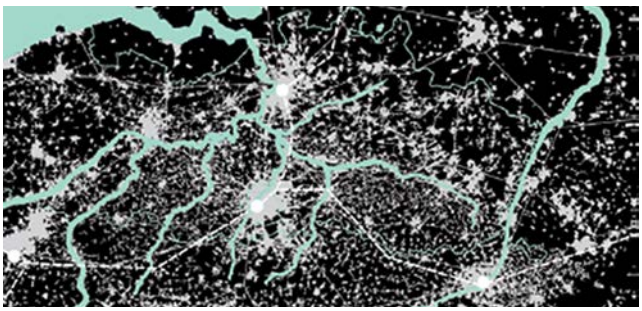
Keywords: Integrated Land Development, Land Consolidation, peri-urban areas

1 Introduction

Since 25 years Belgium is a federal country divided in the regions Flanders in the north, Wallonia in the south and Brussels-capital. To some extent, these regions can be compared with the German *Länder*. The regional governments, and not the Belgian federal government, have the authority to organise their land development. In Flanders, the Flemish Land Agency, in Dutch *Vlaamse Landmaatschappij* (VLM), is authorised by the government to induce and execute land development in rural areas and urban fringes. Of course, land development initiatives are also taken by other government agencies, by provinces and municipalities, by NGO's or private companies. But these initiatives are mostly on a smaller scale, or they focus on one specific function: for instance building a highway by the road authority, developing a park by a municipality, creating a new nature reserve by a NGO etc. This article describes land development by the VLM, commissioned by the government and based on a specific legislation.

2 "Rurban" Flanders

Flanders is a densely populated and highly urbanised region. It has a population of 6.4 million inhabitants and an



Vlaamse overheid 2012

Fig. 1: Flanders at night: an urban nebular or sprawl in central northwestern Europe. Left the North Sea, Brussels in the middle.

area of 13.5 thousand square km, meaning 470 inh./km^2 (SVR 2013). Moreover, the capital-region of Brussels is an island within Flanders, so much of the infrastructure, such as the ring road, the airport, many industry and office zones etc. are located in Flanders. Moreover, only 60 % of the Flemish population lives in cities, and the other 40 % lives scattered all over the countryside (SVR 2013). The Netherlands for instance, has a comparable population density, 450 inh./km^2, but Dutch people live much more concentrated in city centers. A satellite photo of Flanders by night illustrates this urban sprawl (Fig. 1) with a built up area covering already more than 27 % of the total area (SVR 2013). As a consequence, the countryside in Flanders looks more like an urban fringe, with more and more of the open area used as private gardens, horse meadows, for hobby agriculture, for recreation etc. It is often called "rurban" and is highly fragmented with almost everywhere an intensive mixture of functions (Gulinck 2004, Dewaelheyns and Gulinck 2008).

As Flanders has fertile soils, most of the remaining unbuilt area is used by intensive agriculture. Professional agriculture covers about 45 % of Flanders, forests about 10 %, and strictly protected and managed nature reserves 3 % (SVR 2013). Not only land use is highly fragmented,

also land ownership. As a result, every land development project in Flanders proves to be a complicated exercise with many interacting stakeholders. As the ground pressure is high, nowadays everywhere in Flanders, ground and therefore ground mobility is (very) expensive, with agricultural land valuing from 20,000 Euro to 75,000 Euro per hectare and more. No wonder conflicts easily arise. At the same time, the farmers who use the land are often not the owner. In Flanders 2/3 of the farmland is rented (Platteau et al. 2012). So both owners and different groups of users, stakeholders with different interests, should be taken into account and compensated when appropriate.

3 From Food Production to Integrated Territorial Strategies

Since the 1930s, Belgian agricultural experts increasingly complained about the fragmentation of the farmland. Although individual exchanges of land already happened on a voluntary basis, they argued that large scale land consolidation, forced by law, in Dutch "ruilverkaveling uit kracht van wet", was necessary to increase agricultural productivity (Fig. 2) (NMKL 1952). The war and food shortage strengthened this believe. But because farmers were afraid of this forced parcel reallocation or re-allotment, meaning losing ultimate control, it was not until 1956 the Belgian parliament succeeded in approving a law giving a legislative basis for land consolidation projects (Dejongh and Van Windekens 2001). The National Agency for Small Land Ownership, NMKL, was commissioned to execute these projects. This agency was founded in 1935, the period of the Great Depression, to stimulate better housing conditions in the deprived countryside (Dejongh and Van Windekens 2001). The NMKL, subordinated to the ministry of agriculture, already had the task to help restructuring the farmland and turning wastelands in productive farmland. In 1970 the land consolidation law was improved and the NMKL changed into the National Land Agency, NLM. In 1988 and following the transformation of Belgium in a federal state divided in regions, the National Land Agency regionalised and the Flemish Land Agency, VLM, was born.

NMKL 1952

Fig. 2: Propaganda drawing of 1952 showing the benefits of land consolidation

From 1956 to 1978 land consolidation projects only aimed to increase food productivity by improving the farmland. The most important tool doing this is the re-allotment of farmland. Re-allotment is a clustering of the fragmented parcels into large units with an optimal, rectangle shape, and located adjacent to or nearby the farm using the land. Not only are the users of the land, the farmers, involved in this operation, also the land owners. As a new cadaster plan (land register) is drawn, both agricultural as cadastral parcels are reallocated. The law prescribes in detail the procedure of this land consolidation, including the way users and owners should participate. The value of all the agricultural land of each farmer and each owner in the project is calculated, before and after the re-allotment operation. The difference must be under a legal maximum of 5 % and is financially compensated (to some extent). The re-allotment is accompanied by infrastructural and land improvement works such as drainage of so called water sick fields, egalisation of land, digging or filling of ditches, changing water courses etc... Also free accessibility is assured for each field and farm. Building new roads and improving existing ones, was and is an important measure in all land consolidation projects. So, the typical 3 m wide (nowadays 3.5 m), concrete land consolidation roads are well-known in the countryside all over Flanders. It should be noticed that once the minister approved the structure plan of the land consolidation project and the project committee, this committee is the legal authority to execute the project.

In 1978, the law was extended to broaden the goals of land consolidation. This resulted in the practice still used in land consolidation, of turning the legal maximum of 2 % of the productive farmland within the project boundaries, to other purposes than agriculture, such as the protection of nature or cultural heritage, recreation or building new landscape structures like hedges.

In 1976 a law was approved for a simplified variant of land consolidation projects which accompany large infrastructure projects, such as the construction of highways. These projects allow a large scale exchange of land between farmers on both sides of the planned highway.

In 1989 land consolidation started with a systematic and integrated study of all rural functions during the planning phase (Van Huylenbroeck et al. 1989). Also, an overall environmental assessment was being made, first as part of the planning method, later on also followed by an independent assessment applying a new legislation. It is noticed that the VLM is not subordinated to the Flemish Ministry of Agriculture and Fisheries, but to

the Ministry of Environment, Nature and Energy. In 2003 a ministerial guideline stated that land consolidation is a tool to develop rural areas in an integrated way. As a consequence, in Flanders is spoken of land consolidation projects "old style", and since 1994 of land consolidation "new style". According to the FARLAND terminology it can be compared with "traditional" and "modern" land consolidation (FARLAND 2007).

Nevertheless, as the main goal still is to improve the agricultural productivity by re-allotment, most rural stakeholders perceive(d) land consolidation projects as a sectorial instrument for agriculture. Therefore, and because the re-allotment procedure is not always necessary or acceptable, in 1988 the Flemish government initiated a new, more flexible instrument "landinrichting", integrated land development, in the same law that founded the VLM. This integrated land development is defined as a tool to change landscape (infra-)structures in rural areas in an integrated way, so that they can fulfill their functions as defined in the spatial plans. The new Flemish law of spatial planning in 1996 and the first overall Flemish Spatial Structure Plan, approved in 1997, both confirmed this role of integrated land development as a tool to implement spatial (rural) planning. In 1998 the legislative basis finally was approved so that the pilot projects could start investing. The Flemish government pays 50 % to 70 % of the investments in collaboration with partners. Investments restore the landscape, develop infrastructure for recreation, improve the ecological functions (Verboven and Ulenaers 2013), build infrastructure that enable a better integrated water management, or which resolve problems of rural mobility etc. An area-oriented approach starting from the qualities of place and collaborating with partners are the main guidelines (VLM 2011). Nowadays, this integrated land development is developed to an important tool of territorial strategies for Flemish rural areas and urban fringes.

In areas for which spatial planning defines nature as the main function, the legislative basis was set up in 1997–98, for a new instrument, called "natuurinrichting" or nature development. To a certain extent, nature development copied procedures of modern land consolidation, but instead of serving agricultural goals, enhancing nature values is the prime goal.

In 2006 the law of Land Bank gave the VLM the task of buying and selling ground in order to execute projects of all kind of the Flemish government. Local land banking and funds set up by the VLM and paid by partners, serve all kind of land development projects by enhancing the necessary ground mobility. VLM uses this tool more and more in other land development projects which are not initiated starting from the legal instruments (land consolidation, integrated land development and nature development projects) assigned to the VLM. For instance, VLM has an agreement with the harbor of Zeebrugge, where VLM develops 500 hectares of nature compensation areas (partly shown in Fig. 3), required by European and Flemish nature legislation and allowing the harbor receiving the necessary permits to expand.

The fifth instrument of land development under the responsibility of VLM is the possibility of farmers to sign a management contract for five years, a so called agro-environmental agreement ("Vertragsnaturschutz") (VLM 2006). Doing so, farmers agree to develop or manage themselves the landscape for specific ecological goals in exchange for a financial compensation. This compensation depends on the chosen management package. It compensates a lower income as well as the extra work enforced by the agreement. There are about 30 different types of measures, which can be contracted, each adapted for a specific purpose, such as planting a hedge, not using pesticides or manure in the edge zones of farmland, sowing grass zones to prevent soil erosion, protecting meadow birds etc. These contracts are co-funded for a maximum of 50 % by the European Union as part of the Common Agricultural Policy. About 1/7th of the total of 28,000 farms in Flanders, have signed such (a) contract(s) (Platteau et al. 2012).

©VLM 2008 (inset), 2011

Fig. 3: Nature development in a polder region to compensate future loss of European protected ecological habitats by the expansion of the sea harbor of Zeebrugge.

As a consequence, legislation gives the VLM a set of land development instruments to invest in rural and peri-urban areas, with land consolidation and integrated land development under supervision of the Land and Soil Protection, Subsoil and Natural Resources Division (ALBON), and nature development under supervision of the Flemish Nature and Forest Agency (ANB), both of the Ministry of Environment, Nature and Energy.

4 Actual State of Land Development: Characteristics and Capacity

4.1 Modern Land Consolidation

Although modern land consolidation still primarily aims to improve the agricultural structures, these land con-

solidation projects realise a land development which benefits all rural functions (VLM 2005). Examples are the construction of paths for recreation, usually missing links, together with safe crossings and bridges, in order to create recreation networks for cycling, walking and even horse riding. In most projects, buffer zones are created between intensive farmland and water courses. Sometimes, even small villages are renovated. For every project VLM has to make an "integrated landscape plan". This plan is to be approved by the minister and is based on the advice of a commission in which stakeholders are represented, on a public enquiry and an independent environmental assessment. Modern land consolidation is a powerful instrument for land development and offers of all Flemish instruments a maximum of land mobility. The projects re-draw the boundaries of land use and cadastral parcels, as well as the extent of the public domain. So, this instrument allows to fit better the right land use with the right location, starting from the quality of place. A fair and equable system of valuation and compensation of the land is elaborated over the decades. The system is based on both the intrinsic value of a parcel as well as on the relative value for the farm it uses. As a consequence, the value of what anyone gives and receives before and after reallocation is clearly and legally determined.

The Flemish government pays all the costs of the (VLM-)personnel, including the external expertise of the planning and the technical design where necessary, and also about 80 % of the project investment or construction costs. Provinces and municipalities pay a legally determined (minimum) share, usually 10 to 15 % in total, so that the land owners pay no more than 5 % of the project investment cost. A typical land consolidation project has an area of 1,000 to 2,000 ha and costs 3 million Euro to 10 million Euro, excluding personnel. A project takes 8 to 15 year, of which half for the actual re-allotment and half for terrain implementation or construction phase together.

Until the beginning of 2013, about 200 land consolidation projects have been started in Flanders, both traditional, old as modern, new style. Together, they total an area of 240,000 ha, of which 180,000 ha is actually re-alloted, or almost 30 % of the total area of the actual Flemish farmland. At this moment, VLM is implementing 18 projects, spending yearly a personnel capacity of 35 Full Time Equivalents (FTE) and about 5 million Euro to 6 million Euro of Flemish subsidies to invest. Planning and implementation is almost completely executed by the VLM, with external contractors controlled by VLM personnel. The land consolidation committee, composed by the minister according to the prescriptions of the law, takes the decisions in implementing the landscape plan and has legal personality, thus responsibility (Fourneau 2013). It is advised by the commission, in which local stakeholders are represented, also as prescribed by the law.

4.2 Integrated Land Development

Integrated land development is an instrument which is applied in rural and "rurban" areas with a higher degree of mixture of functions. This instrument intends more to create collaboration between actors. Until 2004, a regional masterplan, "richtplan", made by the VLM based on a whole battery of studies, preceded the actual development plans, "inrichtingsplannen". As the provinces and the municipalities have developed spatial structure plans giving a legal vision of their territory, the regional master plans are not necessary anymore (Pauwels 2002). Since 2004, they are replaced by smaller area-oriented (plan-)programs for land development, also edited by the VLM. VLM emphasises that new projects are initiated based on clear and specific demands of partners, the so called demand-oriented approach (Celen et al. 2007). The minister approves such a program, together with a financial envelope of subsidies to implement the program. As the areas affected by these land development programs range from a few hundreds to thousands of hectares, the accompanying subsidies also differ from a few hundred thousand Euro to more than 10 million Euro. Sometimes, these programs are also implemented by other instruments, such as land consolidation and nature development, which bring with their own sources to financing.

Within the perimeter of an integrated land development program, VLM makes 1 to 10 or even 16 different development plans. These plans usually are made for a certain project area within the total program perimeter. They are made up area-oriented with an integrated approach of the functions and questions for land development of the different partners (Celen et al. 2007) (Fig. 4). Sometimes, land development plans deal with one important issue in the whole program perimeter, so it is a thematic plan, for instance concerning the recreation infrastructure. A land development plan which is agreed on by all partners, is approved by the minister, usually after a public enquiry organised by the municipalities. The minister assigns the different partners to implement the plan and provides subsidies out of the envelope of the program. These subsidies range from 70 % for construction measures to 50 % for the acquisition of land. Land mobility is based on a voluntary basis, often using (VLM-)land banking, sometimes by expropriation which can be necessary to obtain missing links (in recreation paths, buffer zones ...). As this acquisition by land banking requires a lot of money and time, and expropriation is difficult to justify or has no local political support, integrated land development is a relatively weak instrument for projects which require a significant area of land, more than already is available by the partners implementing the plan. Small integrated land development plans require 400,000 Euro to 800,000 Euro land development subsidies. Large projects invest 4.5 million Euro of Flemish subsidies. Some projects need only a very small amount of subsidies, and can be seen as area-oriented

multi-actor agreements, approved by the Flemish minister. Usually, the VLM pays most of the planning and study costs. Most of the work to set up and implement a project is done by VLM-personnel.

From the beginning of Flemish integrated land development in 1998 to the beginning of 2013, about 150 projects have been started, of which about 90 projects are completed or in some cases, stopped. The individual project area varies a lot, from tens of hectares to several thousands of hectares, for instance for the plan to develop the green belt around the city of Bruges. From the project initiating to the finish of the constructions, projects take 5 to 10 years, of which usually two years for the planning phase. Every year, VLM spends about 45 FTE of its personnel capacity for integrated land development, and invests, together with the partners, 4.5 million Euro of Flemish subsidies.

Fig. 4: An integrated land development project buffers a water course, at the same time (inset) giving space for a footpath and landscape elements such as trees.

4.3 Nature Development

Nature development projects reconstruct, develop or preserve nature values. As in land consolidation, ownership or use of parcels can be exchanged. Compensations can be paid to farmers, for instance when the water level is elevated to enhance ecological values, but causing loss of income. Nature development is primarily to be used in areas where farmers still use land while the spatial plans designate it for nature goals, for instance as an European protected Natura 2000 area. Since 1998, under supervision and with budgets of the Agency of Nature and Forest (ANB), VLM has started 40 projects for a total area of about 20,000 ha. A project takes about 8 years, but can vary a lot between 4 and 15 years. Almost 20 projects are now in planning phase or are being executed. The Flemish government pays 100 % of the investments, with the exception of voluntary ecological measures of partners or other co-funding such as from European LIFE(+)projects. Every year, a budget of 3.5 million Euro is invested, and VLM spends about 20 FTE of its personnel capacity for planning and implementing these projects.

4.4 Need for Multidisciplinarity

In all these land development projects, VLM disposes of multidisciplinary teams. Besides the project leader, a typical team consists of an agricultural economist and engineer, an ecologist, a hydrologist, a soil expert, an archeologist, a landscape architect who usually studies recreation as well, a land expert who buys the land and manages the land bank, a topographer, sometimes a rural mobility expert, and an engineer who manages the contractors executing the construction or making the technical designs (if not done by the VLM itself), and assisted by a terrain works or yard supervisor. The teams are supported by GIS- and ICT-experts, a project secretary, a land administration secretary looking for all the legal rights of land users and owners, and a communication cell. Between the six different VLM-offices, these specialists share knowledge in networks, or work together in project teams. The VLM-headquarters in Brussels have a rural policy department and a department for general project coordinating and support. They support for instance management information systems and make operational guidelines. The VLM has two regional departments, one for the west of Flanders with two offices, and one for the east of Flanders, with three offices. So, in each of the five provinces of Flanders, there is one VLM-office, close to the project areas and local stakeholders.

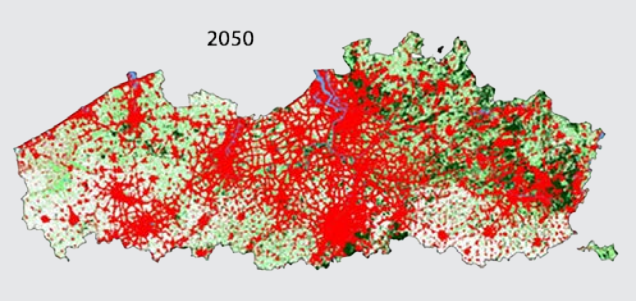
5 Land Development in a 21st Century Metropolis: Quo Vadis?

In the 21st century, land development is coping with big challenges of different kinds. In a way, these challenges are global, but they always should be translated using an area-oriented approach, in this case starting from the Flemish situation with regard to the specific qualities of place.

5.1 Up-coming Challenges

As the number of inhabitants, and moreover the number of households will increase with 15 to respectively 20 % in the next three decades (VMM and INBO 2009), the urban and peri-urban character of Flanders will grow significantly. If no action is taken, forecasts show that the built-up area together with its gardens will double in area by 2050 to 40 % of the total area of Flanders (Fig. 5). This means the remaining open area will be on a higher urbanisation pressure than it already is. At the same time, Flemish industry is always demanding more space.

Situated at the crossroad of northwestern Europe where 80 million people live in a triangle of only a few hundreds of kilometers, Flanders has chosen to strengthen its logistic importance. This is translated in important expansions of its logistic ports, for example the harbor of Antwerp. As accordingly Flanders is facing a mobility infarct, it is investing in new transport links to the hinterland, building new highways and railways to transport these goods.



Poelmans 2009

Fig. 5: Forecast of the land use in 2050, with red as built-up areas covering 40 % of Flanders

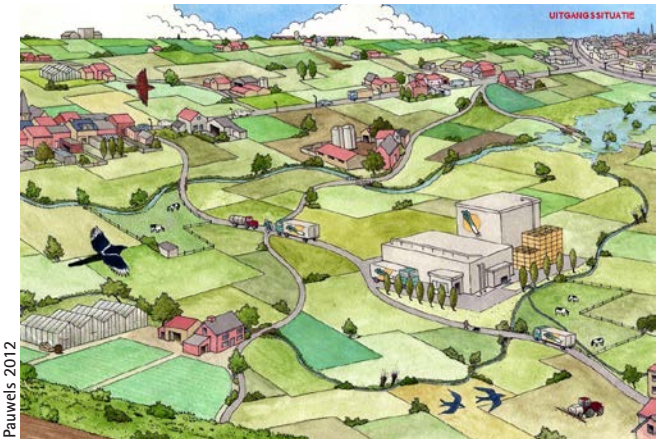
At the other hand, global climate change is translated in Flanders in higher risks of flooding because of the higher frequency of very heavy rainfall, and at the same time a significant increase of drought and evapo-(transpi-)ration in summer (Poelmans 2009). In both cases, this means more space is needed to buffer water, for instance by restoring valleys with areas of controlled flooding. Although Flanders is already executing large scale projects in its river valleys to prevent flooding downstream and to restore ecological values, it is estimated that substantially more efforts are necessary to cope with this water problems (Poelmans 2009). Especially upstream, in smaller catchment areas, measures should be taken, for example by developing chains of water buffers along watercourses. These water buffers can also be used for irrigation of for instance the intensive horticultural crops. This horticulture is important for the Flemish frozen-vegetable industry which is accounting for more than 40 % of the total European production (Van Haverbeke et al. 2008). If Flanders wants to keep its – more or less – self-sufficiency in food production, with the exception of animal fodder, agricultural production landscapes should be preserved and strengthened. Sustainable agriculture also means a brighter future for the now highly fertile Flemish soils. They will be more threatened by water and wind erosion because of climate changes. At the same time, they should be used less intensively as many soils have lost a healthy organic matter content. Higher temperatures will increase the need for combatting hostile insects and other pests. Decreasing the need of pesticides can be achieved by a higher functional agricultural biodiversity in the agro-ecosystems (Verboven and Ulenaers 2013). All this means that Flemish agriculture, wanting to maintain its very high level of productivity, will need more space to be ecological and economical sustainable.

At the same time, the (semi-)urban population needs more recreation areas, such as parks and urban forests. Moreover, foresters and NGO's argue that Flanders should increase its wood production, so that Flanders imports less than 90 % of its wood consumption, partly from threatened northern or southern forest ecosystems. To fulfill the European Biodiversity 2020 targets, Flanders needs more space for nature or for land with a more extensive agricultural land use. Especially in areas protected by the European Bird Directive, agricultural and ecological values are strongly interwoven and conflicting.

As Flanders is too small for all this claims, only an answer can be given by a multifunctional, integrated land development with a capability to avoid a net paying of huge amounts of money for land mobility. The difficulty to reconcile so many stakeholders who all have legitimate claims only has been growing in the post-modern, social media network society. Civilians speak out their feelings and claim their rights they pretend to have, and they organise themselves and find their way to the politicians and courts to block projects, often expressing a "nimby". Politicians often are anxious to cause public trouble. The importance of good participation processes and of project ownership is consequently growing. Collaboration with public and private partners is a key success factor, more than ever.

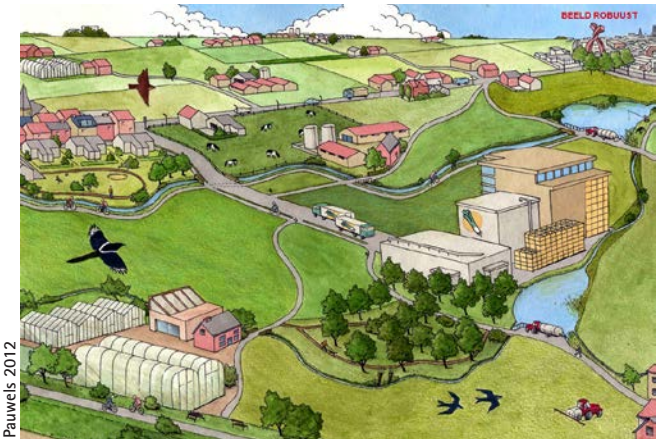
On the other hand, as governments at all levels economise due to the economic crisis, it is likely that public budget lines for land development will not increase, but rather decrease. Authorities should make more choices and combine efforts of different administrative authorities and agencies. Economic arguments are increasingly important to find public funding at all levels, which explains the inflation of economic valuing systems and the translation of ecological values in ecosystems services (Verboven and Ulenaers 2013). Also new European rural and regional policies emphasise this economic importance, together with a shift of funds for rural projects to new and poorer member states or regions.

Governments at all levels have less personnel to execute projects and to pay the management or place keeping after the place making. A smart land development allows an efficient management afterwards. Sufficiently large and multifunctional landscape structures have an advantage. Machines can be used, for instance to harvest the green energy cheaper than when it's done (semi-) manually. Many functions, so many users can contribute directly or indirectly to a greater willingness to pay for both the place making and keeping. So, landscapes and its elements in Flanders should be highly productive for agriculture, for nearby recreation, for nature, for landscape values, for integrated water management, for smart rural mobility avoiding unwanted traffic etc. And where possible, they should combine these functions. Fig. 6 and 7 illustrate how integrated land management recreates the already high productive landscape in the heart of the Flemish frozen-vegetable region. Fig. 6 shows this



Pauwels 2012

Fig. 6: A typical Flemish fragmented "rurban" landscape in the center of the frozen-vegetable industry region, with growing problems for all functions



Pauwels 2012

Fig. 7: The intensive landscape as shown in fig. 6 after integrated land development created robust multifunctional landscape structures, coping with the demands of the users

fragmented Flemish landscape with typical and growing problems. Fig. 7 shows the results of the integrated land development, creating for all users or functions more efficient, robust multifunctional landscape structures that help solving problems, all in a Flemish perspective and scale.

5.2 Legislative Needs

As it was perceived by the VLM that its instruments are not adapted to cope with these challenges, VLM started a few years ago to fasten the transformation of the existing instrument of integrated land development, into a more flexible and powerful instrument (Celen et al. 2007). Together with writing draft legal texts in cooperation with other Flemish administrative authorities and with policy makers and advisors, VLM started experimenting with projects using a whole set of tools, without the procedures bound to the three instruments described above. At December the 20th, the Flemish government agreed that the final draft of a new decree for land development can be presented for the Flemish Parliament for final approval. The new instrument of integrated land development, which is intended to replace the existing instrument, can be seen as a set of tools from which can be chosen according to the specific demands of each project. It is like a toolbox, or a Swiss knife, with many alternative tools to be used in varying combinations, regarding to land development measures, land mobility such as land banking, pre-emption right (which already exists for example in land consolidation and in nature development), relocation or reconversion of farms, management agreements, compensations for loss of value, compensations for delivering services, ownership exchange in combination with an exchange of spatial zoning etc. The new legislation prescribes a method that should be followed when choosing which tools will be used in a land development project. For every project, the need of using the different tools to acquire land, to develop land, to manage it in a certain way, will be evaluated in order to achieve the specific goals and given the qualities of the places and the legislative context of the project area(s). Moreover, the law would give the opportunity to other Flemish, provincial or municipal authorities, to use this toolbox for their own land development projects, if certain conditions are met, under supervision of the VLM, and after approval of the Flemish government when using the more powerful tools.

6 Conclusions

For almost six decades, Flemish land development has been adapted to changing perspectives. During this time span, the Land Agency developed a set of instruments, each with its own goals and procedures. It started with traditional land consolidation to enhance food productivity in the 1950s, which was transformed in the 1980s and 1990s to modern, integral land consolidation with a broader rural scope. About one third of Flemish farmland has been improved by this instrument. At the end of the 1990s, the instrument of integrated land development gave an answer to the more complex demands of society, and coping with a mixture of rural functions. As land mobility is a crucial success factor in land development, the instrument of land banking has recently been set up to support all kinds of land development projects, without the necessity to start a long lasting land consolidation project.

As Flanders is changing in one urban network society, with rural or "rurban" spaces that everybody is claiming, land development is at a turning point. Land development should dispose of a flexible and efficient toolbox to cope with the global, European and Flemish challenges of the 21st century. Important steps in this direction can be made with the approval and efficient implementation of the new land development legislation. Using these tools, in collaboration between public and private stakeholders, a high quality of place can and should be achieved in the heart of the northwestern European metropolis.

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Author's address
Dipl.-Ing. Frans Pauwels
Vlaamse Landmaatschappij Regio West
Velodroomstraat 28, 8020 Brugge, Belgium.
frans.pauwels@vlm.be

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