The Netherlands: the public development of land
*Erwin van der Krabben, Huub Ploegmakers and Ary Samsura*

1. Introduction

Planning practice in the Netherlands largely relies on public land development, which is at the core of the municipalities’ strategies to achieve their planning goals. Dutch local governments have always played an active role in acquiring (agricultural) land, servicing that land for future building and supplying it to home builders and other users. The main reason that they have adopted this role is that ‘they want to steer development in a pro-active way and that they want to earn money to finance the costs of public works like streets, sewage systems and public space that are necessary for new urban development’ (Needham, 2007: 181).

The aim of this contribution is to assess the public land development model as it is used in the Netherlands in the context of the developments that have taken place in Dutch local land markets since the 1990s, when market circumstances on the Dutch land and housing market changed. We believe that the developments that took place in Dutch local land markets may yield wise lessons for local governments in other European countries about embracing a public land development strategy. Only specific circumstances may justice such a strategy.

The structure of the paper is as follows. Section 2 discusses public land development in the Netherlands: its background, goals and achievements until the 1990s. Section 3 critically assesses the advantages and disadvantages of this development strategy. Section 4 describes the developments on the land market in the Netherlands since the 1990s and the changing roles of municipalities and private actors in this market and evaluates the effectiveness of public land development as a planning strategy. In section 5 we conclude with some lessons that can be learnt from the Dutch case.

2. Public land development in the Netherlands

The public land development model encompasses a public developer – usually the municipality, though in the Netherlands the provincial and national government may serve this role as well - who buys all the land to be developed, readjusts the parcels into forms suitable for the desired development, and sells those parcels. The income from the land development comes from selling the building plots (Needham & Verhage, 1998; Needham, 2007; Groetelaers, 2004; Van der Krabben & Needham, 2008). Dutch municipalities have always felt responsible for the development of land. The earliest public initiatives started with the large land drainage projects hundreds of years ago (Needham, 2007). However, the ‘modern’ public land development model came about in practice after World War II, when there was a
huge demand for new housing and also land for industrial use. To assure that sufficient land would be available municipalities took up the task themselves. In a way, building land was considered to be analogous to other public utilities like roads, sewage systems and energy provision.

It is likely that more recently private land developers or large building construction firms could have taken over the land development role. However, the situation remained as it was for a long time for several reasons. First is the municipalities’ quest for control. Municipalities wanted to have guarantees that their land-use plans would be implemented in the way they envisioned them (the pro-active planning argument). Based on the former Spatial Planning Act, municipalities could in their land-use plans allocate land for a certain use (i.e. housing), but they were not able to distinguish between different types of housing (social housing versus owner occupied housing). However, as the land owner municipalities could sell the building land to selected buyers for specific purposes. So, for example, housing associations (public housing authorities) could be targeted to take up the task of land ownership for the purpose of building large amounts of social housing. Second, the public land development model offered municipalities financial benefits. It gave them the opportunity to recoup all the costs of their investments in the public investments that were necessary for the development, by making sure that the selling prices of the building sites generated sufficient income to cover all their costs. Those public works often included inexpensive land for uses such as social housing, schools and public parks. In many instances, municipalities were able to make a profit from land development. Those profits were used again to invest in new, less-profitable projects. In situations where the financial outcome of land development appeared to be negative, municipalities could always adjust the plan (higher densities, less social housing) to improve the financial situation. (Whether that is a matter of good planning is something else!).

Nobody knows exactly how much money municipalities actually make from land development. Korthals Altes (2008) showed that on average municipalities seem to make a lot of money out of land development. However, the situation can differ among municipalities. Examples are also known of municipalities that lost a lot of money with public land development. Finally, most private developers appreciated the land development role of the municipalities. Public land development guaranteed them good-quality locations to build on – if necessary, municipalities would make use of their eminent domain powers and pre-emption rights to assemble all land that was necessary – it reduces the developers’ risks and the private developers primarily earned their money with the building of new homes (and not with developing land).

90 The new Spatial Planning Act has been implemented in 2008 and changed this situation: see section 3.
91 For example, in 2005, 12 per cent of local government income came from land development revenues (Korthals Altes, 2008; cited in Buitelaar, 2010).
92 A recent report by Deloitte Real Estate Advisory shows that all Dutch municipalities together might lose in 2010 over € 3.0 billion on public land development due to additional rental costs, because the demand for building land has dropped (Deloitte Real Estate Advisory, 2010).
To understand better why all stakeholders in land and property development have been more or less pleased with the public land development in the Netherlands, it is necessary to take a closer look at the conditions under which public land development took place until the early 1990s. First, the public land development model does not imply that municipalities hold a monopoly on land development. However, most homebuilders were not interested in land development, because the costs of making the land available and servicing it was too high. Particularly in the Western part of the Netherlands (the Randstad region) the costs of land drainage investments were often substantial. Municipalities were able to carry out these works on a large scale, which made the costs acceptable for them (economies of scale occurred). Second, the Compulsory Purchase Act (Onteigeningswet) allows municipalities to use eminent domain powers ‘in the interests of spatial planning and housing’, for instance to implement a land use plan. The owner’s disagreement with the contents of a land use plan will not help him very much in an appeal relative to compulsory purchase.\textsuperscript{92} Compensation is paid based on the real value of the property (the price in a free market transaction). In practice, though, municipalities only very occasionally have to use eminent domain powers (Buitelaar, 2010). Hold-out problems do not occur very often. However, it seems that the relatively strong eminent domain powers help municipalities to carry out their land development strategies: landowners sell voluntarily because they know that they will be expropriated otherwise. Third, for a long time municipalities have been able to acquire (agricultural) land for residential or industrial use relatively cheap, for a cost that is just above the price of agricultural land. The landowners (farmers) accepted those prices; they were probably unaware of the real market or residual value of their properties (Needham, 1997; 2007).\textsuperscript{93} And fourth, most municipalities were not very much aware of the full market value of the building sites that they sold to homebuilders (Needham, 1997; 2007). Usually, they sold the building sites against cost price (the total costs of acquiring and servicing the land), in effect giving away part of the market value to the homebuilders.

Public land development is certainly not an exclusively Dutch phenomenon. Other countries, including France, Sweden and Finland, also make use of this practice (Altermann, 2009). It seems, however, that this practice in other countries has not attracted the same attention from academics as it did in the Netherlands, probably because in those countries the strategy is not as dominant as in the Netherlands and because public land development has not encountered the same problems as in the Netherlands.

\textsuperscript{92} There is however one specific situation in which compulsory purchase is not possible: when the owner can claim that he is able to carry out the development himself, the municipality will not be able to make use of its eminent domain powers. In the 1990s private developers successfully made use of this right (see section 4).

\textsuperscript{93} Note that the real market value of land was still rather low, because of the large share of affordable housing (‘social housing’) in house building construction.
3. How to achieve spatial planning goals: can land market strategies offer a useful tool?

For an assessment of the Dutch public land development model from the outside, we refer to a study, more than thirty years ago, by Lefcoe (1977). Lefcoe’s main goal was to investigate the use of public land development as a strategic tool for American cities. While not aiming to give a full assessment of the Dutch model, Lefcoe nevertheless puts a number of interesting question marks on the model. The first question mark concerns the tools of local governments to achieve public land development goals. Lefcoe’s basic argument is that if a country prefers public land development (for whatever reason), than governments should have the appropriate powers to act in that way. In the Netherlands local governments act as public land developers, but private developers are not restricted from doing so as well. Lefcoe (1977: 221) argues that ‘(…) where, as in the Netherlands, municipalities are accustomed to developing, one might expect that property owners of exurban land would enjoy no right whatsoever to urbanize their sites (…)’. This would give local governments near monopoly of all land development. In Lefcoe’s opinion, there is no reason to think, without such a monopoly, that governments could succeed in achieving their goals. They might lose to competition from private developers who are willing to pay a higher price for agricultural land. Additionally, he argues that governments should be able to make use of eminent domain powers against present use values supporting public land development, instead of allowing land owners to be expropriated against full market values, including a certain amount of ‘hope’ value, as is the case in the Netherlands.

The second issue with respect to Dutch land development practice raised by Lefcoe is related to what is called in the Netherlands the ‘two-hats dilemma’ (dubbele petten problematiek). Needham (2007, p. 184) explains it as follows: ‘the municipality wears the hat of a statutory planning agency which is supposed to enact approved planning policy; and it wears the hat of a land developer who has invested huge amounts in the location’. The dilemma for the municipality is that certain decisions with respect to land use may be good for achieving planning goals, but have a negative effect on the returns of their land development practice. The real problem, of course, occurs when a municipality makes a decision that is good for development profit but bad for planning. Lefcoe warns about the latter situation: ‘(…) if governments were seeking to earn profits as land developers there is no reason to assume that they would behave any differently from the way profit-maximizing firms act in today’s market’ (1977: 183). Moreover, ‘(i)f governments were also land developers in their own right, (…) they would be tempted to

Remarkably, at the time that Lefcoe published his article the Dutch Cabinet had to resign, because the coalition partners were not able to agree on a new draft expropriation law. The PvdA (Labour Party) wanted to introduce ‘present value’ as compensation value for expropriation, instead of ‘fair market value’, but the CDA (Christen Democrats) did not agree. The expropriation law was not changed with respect to this issue and land owners still receive fair market value as compensation for expropriation.
compromise their role as environmental regulators, especially in applying restraints
to their own development activities’ (ibid).

Third, Lefcoe questions the effectiveness of public land development as a
mechanism to recoup the costs of public works: ‘(…) one might argue that, if
transferring land gains from private pockets to public coffers is the goal, taxation
seems a far better way to do so. The government can tax without putting public
money at risk in the land market’ (1977: 169).

Fourth, and related to the previous point, the Dutch way of public land development
entails considerable financial risks. Needham (2007, p. 182) also points out the risks
of the public land development model: ‘(t)ens of millions, sometimes hundreds of
millions, of Euros, are spent by municipalities, an expenditure which must be
recouped, often many years later, by selling the land’. As mentioned above, Dutch
municipalities are able to make money, but there are many examples of
municipalities that also lost a lot of money through public land development (see
note 4). In the second half of the 1970’s, many municipalities invested in acquiring
land for future industrial park development. When the economic crisis of the early
1980’s caused a reduction of the demand for industrial land, some of those
municipalities lost substantial amounts of money because of the interest charges they
had to pay (Needham, 2007).

And finally – though it can be considered both as negative and positive – the public
land development model leads to a large degree of uniformity in Dutch urban
developments. Lefcoe claims that ‘(w)ithin each municipality, Dutch expansion areas
are often uniform in appearance because the city itself is responsible for installing all
infrastructure, from paving the roads to landscaping the fire station. Efficiency and
predictability argue for a high degree of repetition in the design of all public
facilities’ (1977: 241).

4. What happened on the Dutch land market since the 1990s

For a long time, Dutch municipalities were quite successful in using public land
development as a pro-active planning tool. However, the conditions under which this
took place began to change dramatically in the early 1990s. To explain the
developments on the Dutch land market since then – to a certain extent ‘predicted’
by Lefcoe - it is useful to distinguish between the land market for suburban
greenfield development and the land market for downtown urban redevelopment.

4.1. The land market for suburban greenfield development

Until the early 1990s public land development remained the common development
model for residential suburban development. However, around 1994, the situation
quite suddenly changed. The changes on the land market since that time have been
analyzed and described quite extensively, because it came as a shock to Dutch
planners (Nooteboom & Needham, 1995; De Greef, 1997; Korthals Altes & De
Graaf, 1998; Verhage, 2003; Priemus & Louw, 2003; Groetelaers, 2004; Needham,
First, a strong increase in the demand for owner occupied housing took place (low interest rates; very ‘accessible’ mortgage conditions; large growth of the number of households; a delayed demand). This resulted not only in a strong growth of housing prices (because of a delayed response of the supply side), but it also made this sector much more interesting for the homebuilding industry. Because of the increase in housing prices, the value of building land increased greatly as well. Commercial developers became, for the first time, interested in strategically acquiring (future) building land: ‘(t)he development gain to be enjoyed by buying unserviced land became big enough to compensate for the risks (Needham, 2007: 193).

Those developments were in fact initiated by the national government’s new national policy document on spatial planning (VINEX: VROM, 1992) that restricted future housebuilding to a number of designated locations close to all major cities (the so-called VINEX locations). ‘… (B)y deliberately creating a scarcity of housing land, the price would increase, so municipalities would be able to make a greater profit on the land development, and with that profit would be able to pay for servicing to a higher quality’ (Ibid.: 193). Quite unexpectedly, but perhaps not so surprisingly afterwards, commercial developers took advantage of this opportunity and actively started to acquire land on the VINEX locations.

In this new situation, both municipalities and commercial developers still preferred an integrated ‘area-based’ development of the VINEX locations, instead of a ‘project-based’ development led by landownership of the commercial developers. As a result, a new pro-active development model came into existence, with full approval of both the public authorities and the private sector: the so-called building claim model. On most VINEX locations, the commercial developers agreed to sell their (recently acquired undeveloped land) to the municipality, against a price more or less similar to their costs to acquire it. The municipalities continued with their role as public land developers and sold, after servicing the land, building sites against full market value to the same commercial developers. The full market value enabled municipalities to maintain a high plan quality. What had changed, however, was that the commercial developers had sold their undeveloped land to the municipalities under the condition of a building claim: they successfully claimed the right to build owner-occupied housing in the VINEX location. The size of that right – the number of houses that they would be allowed to build – depended on the amount of land that they sold to the municipality. The strong and continuing increase of housing prices, combined with the high plan quality, guaranteed for them (huge) profits on house building.

Those developments have led to completely changed conditions in the land market. First, the bargaining position of municipalities in respect to the commercial developers was bad. Municipalities could not make use of their eminent domain powers in the case of commercial developers holding land (see note 5). Moreover, when a commercial developer wanted to develop its land on the VINEX location privately, a legal basis for cost recovery of the public works in the remaining part of
the location was missing (those commercial developers were called free riders). In practice, it meant that many commercial developers were able to get the most out of their building claim. Second, the building claim model prevents a competitive market for building sites (which was of course the intention of the landholding commercial developers). And third, the developments since 1994 have led to an increased ‘awareness’ of the value of landed property, on the part of agricultural land (farmers), commercial developers and municipalities. As a result, the costs of acquiring agricultural land for residential development has increased sharply (Luijt et al., 2003), at the same time reducing the profitability of public land development and the resources for municipalities to invest in plan quality.

To improve the position of the municipalities on the land market, in 2008 a new Spatial Planning Act was adopted (MinVROM, 2008).95 The part of the Spatial Planning Act that is relevant in the context of the above discussion concerns two main topics96. The new Spatial Planning Act contains a new legal basis for cost recovery of public works, even if the municipality is not holding the land and, moreover, it gives municipalities better options to guide development (including the option to include social or affordable housing – and not ‘just’ housing – in land-use plans). The latter implies that a municipality may force landholding private developers to include affordable housing development in their development plans. Those legal chances have improved the bargaining position of municipalities to commercial developers, but, quite remarkably, have not (yet) changed planning and development practice (Buitelaar, 2010). The new statutory powers of municipalities give them the possibility to achieve planning goals without making use of a public land development strategy. However, most municipalities continue to make use of a public land development strategy (Buitelaar, 2010), despite the financial risks and the continuing negative impact on the competitiveness of the land market, mainly because they want to keep control over developments.

4.2 The land market for downtown urban redevelopment

The implementation of the Land Development Act may have improved the effectiveness of public land development for residential greenfield developments. New problems have appeared however in urban redevelopment projects. Now that many of the Dutch cities have shifted their attention from residential greenfield development to targeting a substantial part of housing production in urban redevelopment areas97, they are facing again difficulties with executing public land

95 Note that this new Spatial Planning Act came almost 15 years after the first changes in land market conditions took place, while most of the VINEX locations have now been developed or are under development based on public private partnership agreements that cannot be changed anymore.

96 The renewing of the former Spatial Planning Act served more purposes. A more comprehensive discussion of this act is, however, beyond the scope of this paper (see De Wolff, 2007; Needham, 2007).

97 In 2004, the Dutch Government set a target that 25 to 40% of all residential development should take place within the existing built-up area. Buitelaar et al. (2008) show that most cities succeeded in achieving this target, with some even above 40%.
development strategies. However, these difficulties are of a different order than the problems with greenfield developments.

Local governments’ public land development strategies in urban redevelopment areas are risky, among other things because of the high costs they must pay for acquiring land and properties (the proposed developments cause high ‘hope values’) and the duration of the project. Moreover, the bargaining position of the municipalities is weak, because all properties must be acquired. Expropriation powers are at hand, but not easy to use. Finally, the new instrument for cost recovery works well for greenfield developments, but not in all cases for urban redevelopment: if the financial results of the project are unfavorable, additional costs of public works cannot be recovered, because it would make the financial result even worse.\(^98\)

Again, a debate has started regarding the necessity that municipalities should adjust their strategies to the changing market circumstances (Needham, 2007; Van der Krabben & Needham, 2008; Buitelaar et al., 2008; VROM Raad, 2009; Buitelaar, 2010). Four alternative strategies have been proposed so far to overcome the above problems. First, Buitelaar et al. (2008) have suggested that municipalities should adopt a more ownership sensitive redevelopment strategy: the content of plans could be adjusted to the ownership situation instead of adjusting the ownership situation to be able to implement the plan. In other words, properties that cannot be acquired easily, could be excluded from the redevelopment project.

Second, several changes in the current – recently implemented – regulation with respect to cost recovery and development gains are already under consideration by the Ministry of Spatial Planning (VROM Raad, 2009). One suggestion has been to change the expropriation law (expropriation against existing use value instead of market value, thus excluding the impact of hope values). And another proposal has been to tax development gains that occur after land use change. It is anticipated that this kind of changes in planning law will improve public land development, because the attractiveness of private ownership of land will diminish.\(^99\)

Third, Van der Krabben & Needham (2008) have suggested introducing urban land readjustment as a new tool in the Netherlands for urban redevelopment projects, following planning practice in countries like France, Germany and Israel (see the contribution by Van der Krabben in chapter 3.6 of this book).

Fourth, perhaps the most obvious way to deal with these problems is to abandon the public land development strategy and to allow more private initiatives for urban redevelopment. As is argued above, the Dutch Land Development Act – though so far ‘interpreted’ in a different way – legally guarantees recovery of the costs of public works in such private sector-led redevelopment projects, without the public ownership of land.

\(^98\) In the contribution by Van der Krabben (chapter 3.6 in this book) those problems are discussed in more detail.\(^99\) Note however that even in the Dutch planners’ paradise planning law will not easily be changed in this way, because of the considerable impact on private property rights.
5. Concluding remarks

The discussion of the Dutch experience with public land development since the 1990s has shown that the threats to this development model have been borne out. First, once private developers find out that land assembly can be a very effective strategy to achieve their housebuilding goals, local governments lack the appropriate powers to continue their public land development strategy efficiently. Second, negative impacts of the ‘two hats dilemma’ – when municipalities favor financial (or economic) considerations over spatial planning goals – may be hard to prove and it must be noted that there is no evidence of such behavior with respect to residential development; however, though beyond the scope of this paper, we should mention that Dutch municipalities failed to distinguish properly between their different ‘hats’ with respect to industrial land policies in the past three decades, clearly demonstrating what can go wrong with municipalities wearing two hats (Needham & Louw, 2006; Van der Krabben & Van Dinteren, 2010; Van der Krabben & Buitelaar, forthcoming). In order to attract new companies and to earn back as soon as possible their investments in the development of industrial parks, many municipalities have abandoned their strict containment policies which they apply for residential development. Publicly owned and developed industrial land has been supplied in large quantities – in sharp contrast with residential land – and sold below market values by municipalities, to win the competition with neighboring municipalities over attracting relocating industrial firms. Third, the application of a public land development strategy in urban redevelopment projects increasingly reveals the inability of the strategy to recoup all the costs of public works. It seems that the impact of the strategy on ‘hope values’ in urban redevelopment areas, increasing the redevelopment costs and reducing the profitability of the development, increasingly impedes full cost recovery. And finally, though not much is known about the financial risks (and losses) of Dutch municipalities in their role of public land developers, there is some recent evidence that municipalities face high risks in times of economic downturn. The most recent financial and economic crisis and the accompanying substantial drop in the demand for building land have already brought some of the larger Dutch cities into (deep) trouble and seems to bring forward now the worst case scenarios for Dutch municipalities, leading to substantial financial losses on their land development activities (see note 4). 100

The arguments that support an active role of municipalities on the land market that have been brought forward seem to have lost at least part of their strength. Nevertheless, there may still be good reasons to improve the effectiveness of planning. We believe that some of the ‘reasons’ for public land development can be

100 Several newspapers have reported recently on the considerable losses some of the bigger Dutch cities made on their land development activities. Binnenlands Bestuur (2010) reports, for instance, financial losses over 2009 on land development in Rotterdam (€ 70 million), The Hague (€ 132 million) and Utrecht (€ 48 million). The City of Amsterdam still showed a positive results over the 2009 activities on the land market (€ 88 million), but has already reported expected losses over land development in the next years amounting to € 360 million.
‘solved’ in different ways (and not necessarily via a public land development strategy). With respect to the cost recovery argument, alternative instruments, like taxation, might do a better – and less risky – approach. With respect to the provision of good-quality locations argument – there is not much evidence elsewhere that the private sector fails to produce market-rate building land whenever there is a need for it. However, with respect to the pro-active planning argument, we believe that there might be specific circumstances in which public sector land development might be an effective tool.

We can identify at least three of those specific circumstances. First, in undeveloped markets land banking strategies, directed to the purchase of vacant and abandoned properties in blighted areas, have proved to be effective tools for the renewal of urban land. Evidence of that can be found, for instance, in American cities (Alexander, 2005). Note that land bank authorities are not land developers in the way Dutch cities are (as described above). They do not take care of the demolishment of the properties, the servicing of the land and, if necessary, the reparation of it into new building sites. Land banking strategies can, however, be extremely useful to generate/initiate new developments in blighted urban areas.

Second, forms of land assembly and land banking can be effective tools in providing inexpensive land for affordable housing. Alterman (2009) provides an extensive overview of all the land-policy instruments that governments may use to recapture the “unearned increment” in land values (created by public planning decisions) for financing affordable housing production. In addition to instruments like inclusionary housing programs, public land development policies have proven able to ‘produce’ affordable housing in large quantities at below-market rates, in the Netherlands, but also in Sweden and Finland (Alterman, 2009: 11).

Third, public land development, in the way the Dutch make use of this strategy, may be a useful tool for the redevelopment of brownfield areas, but then used in a more selective way. Brownfield areas are often so difficult and risky to redevelop that nothing will happen without pro-active government interventions. To generate private investments, public land development in a part of the redevelopment area might be a useful strategy. It takes away part of the risks for private investors and may set off private sector development initiatives in other parts of that areas.

6. References

Alterman, R. (2009), ‘Can The “Unearned Increment” In Land Values Be Harnessed To Supply Affordable Housing?’, Un Habitat Glnt Conference, October 2009, Warsaw


