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EN ECONOMISCHE GEOGRAFIE

RESIDENTIAL BEHAVIOUR OF HOUSEHOLDS WITHIN THE FRAMEWORK OF SUSTAINABLE DEVELOPMENT

s u m m a r y

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I. INTRODUCTION

Towards a sustainable development policy



The project forms part of the DWTC programme “Levers for a sustainable development policy”.

Causes of non-sustainable development



One of the levers consists of the study into the cases of *non*-sustainable development.

Reasons behind the non-sustainable nature of human behaviour



What are the reasons behind the non-sustainable nature of human behaviour?

Households = pressure sector



Households are one of the pressure sectors, alongside industry, agriculture, tourism, the energy sector etc.

Residence, living and travel ⇒ residential choice



It is a matter of revealing the mechanisms by which a sector functions. Both patterns of consumption and production and the ways in which people reside, live and travel are concerned.

Research project: “Residential behaviour of households within the framework of sustainable development”

Once the residential patterns have been surveyed, it is possible to move on to an analysis of the problem points and make an efficient study of the possible instruments which can be used in remedying these problem points and adjusting sectoral policy in the direction of sustainability.

II. OBJECTIVES

The research project is supported by various pillars in relation to the *stated objectives*.

- a) Households determine the spatial patterns of the residential function through choice of residence. In Belgium, a decline in the urban residential climate to the benefit of urban-fringe residential zones has been evident for a considerable time. The process of suburbanisation is a significant factor in this:

- *surveying the residential preference and residential mobility of today, paying particular attention to the process of suburbanisation,*
- *determination of the profile of people moving house and their reasons for doing so.*

- b) The process of urbanisation brings together large numbers of non-sustainable features which are experienced as problem points. This process in itself has a great space-consuming effect. The process of suburbanisation promotes the separation of the various functions, primarily of living and working, which implies an increase in mobility. An increase in energy consumption and numerous secondary problems for man and the environment can be linked to this. Another problem point consists in the costs associated with the process of urban expansion. It is not just the costs experienced by the individual households which are involved but in particular the additional costs to the community in putting in place the spatial structures of suburbanisation. Alongside these, significant financial disparities grow between the environments involved:

- *examination of the significance of consumption of space and energy due to urbanisation and suburbanisation,*
- *examination of where the costs and additional costs of the process of suburbanisation are to be found,*
- *analysis of the role of the municipalities in relation firstly to the costs associated with suburbanisation and secondly to the increasing fiscal disparities between city and suburbs.*

- c) The role and impact of policy and the Belgian attitude towards suburbanisation and urban expansion go some way towards explaining the present forms of suburbanisation. The efficiency of the policy pursued is low in comparison with a number of examples from other countries:

- *performance of an international comparative study on the policy approach to urban expansion for the policy sectors directly involved: physical planning, land policy, housing and fiscal measures;*
- *comparison with and assessment of the Belgian situation.*

- d) A properly substantiated basis is given to the formulation of policy recommendations within the Belgian context through knowledge and study of the approach to the process of suburbanisation in other countries:

- *the principal objective consists in drawing up policy proposals to check urban expansion and control it better in relation to the objectives of sustainable development.*

III. RESULTS

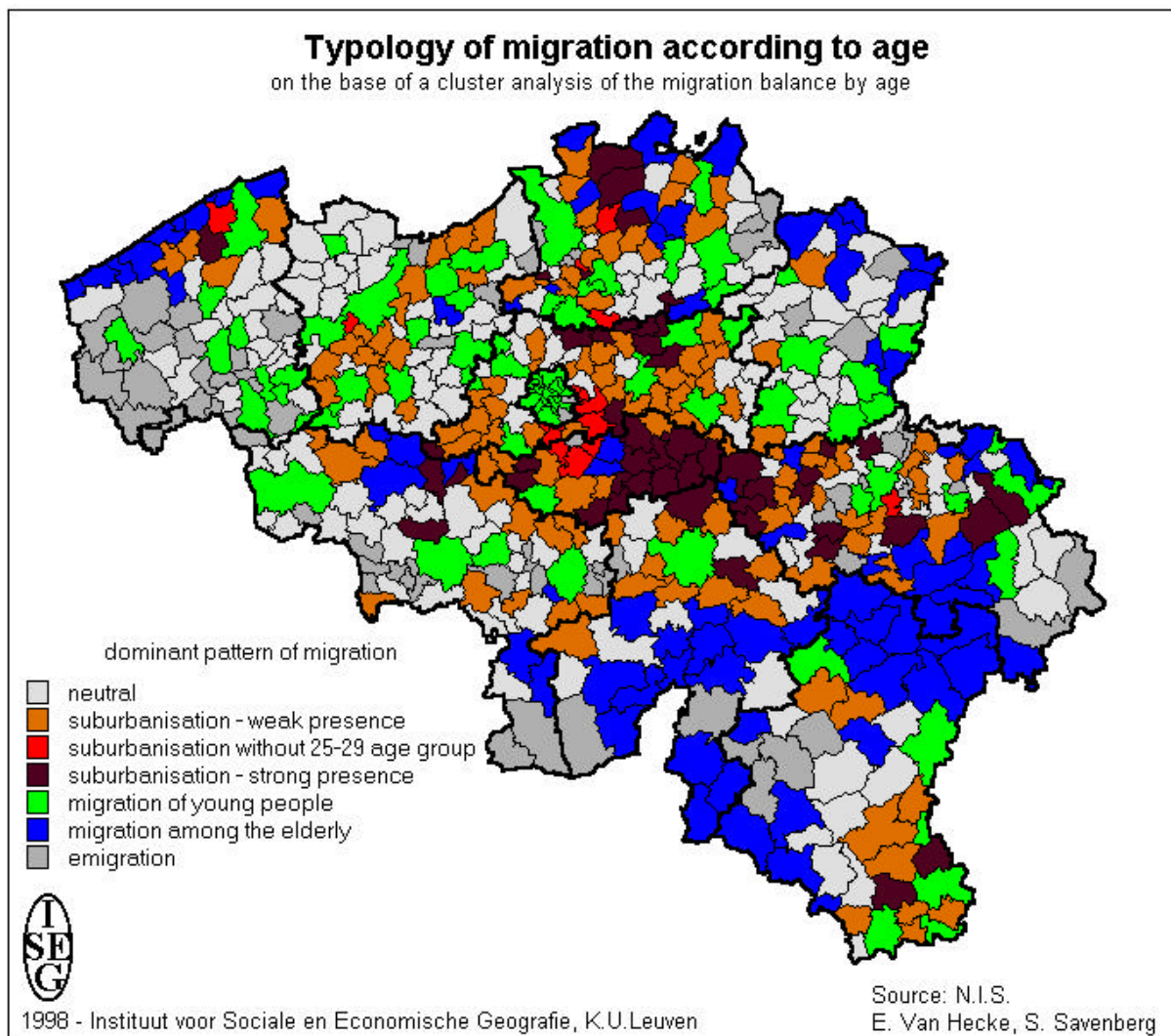
III.1. The residential choice of households

III.1.1. Patterns of migration

Residential migrations are age-related. Change-of-residence activity is noticeably greater in some age categories. This age pattern agrees with the various phases in the cycle of life. Some phases of life are inherently associated with a change of residence, while others often give rise to it: setting up home on one's own – marrying/cohabiting – expanding families – shrinking households – retirement – elderly.

Residential migrations are location-related. Areas of attraction and repulsion become apparent, which largely coincide with the classification of space according to the functional level. Municipalities are classified on the basis of their functional level, the city and town centres forming one extreme while the rural municipalities form the other.

Linking the two parameters allows three main types of migration to be distinguished: migration of young people, suburbanisation and migration among the elderly.

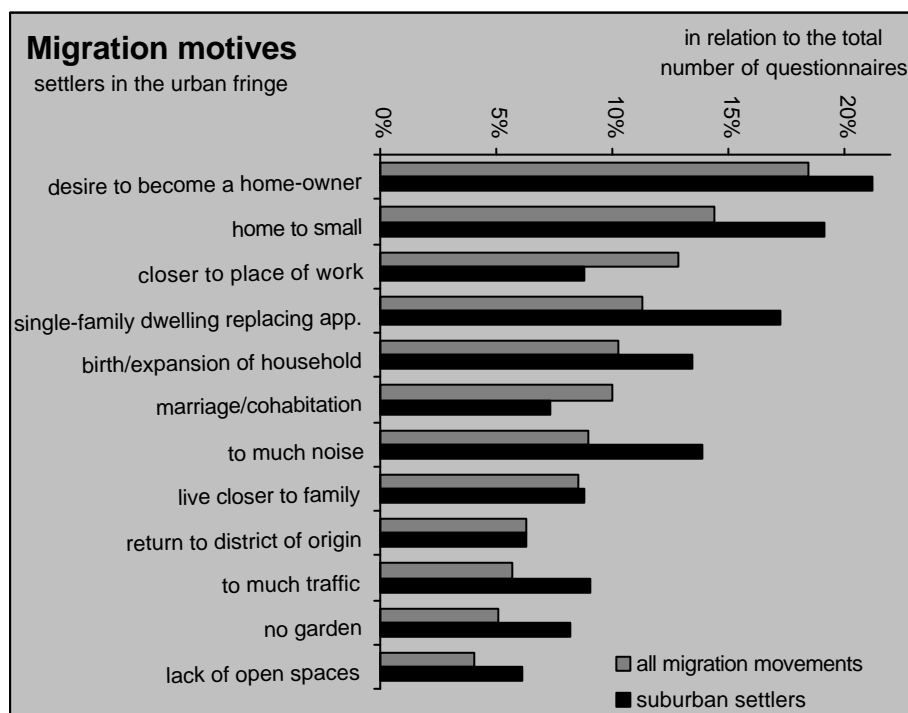


Residential migrations with the process of suburbanisation are dominant within the complete package of migrations. The city centres are left in exchange for a home on the suburban fringe. Most participants in the suburbanisation group are in their late twenties and, in particular, in their thirties. The children also differ, but they do not decide independently on residential migration and follow their parents. Migration of young people is concentrated in the cities, where 18 to 24-year-olds are the only age group with a positive migration balance. In migration among the elderly, Southern Belgium and the coastal municipalities are attraction zones.

Over a third of Belgian municipalities are characterised as suburbanisation municipalities. Since the pressure exerted by the households on the surrounding area depends principally on the choice of place of residence, there is heavy pressure on space in Belgium.

III.1.2. The migration motives of suburban settlers

The list of migration motives confirms the stereotypical and culturally determined picture attached to suburbanisation. Young expanding families look out for a home of their own with a garden in the urban



fringe, with a view to settling in the long term.

This comes after an initial phase in the urban centre, where traffic, noise and lack of open spaces come to cause too much disruption.

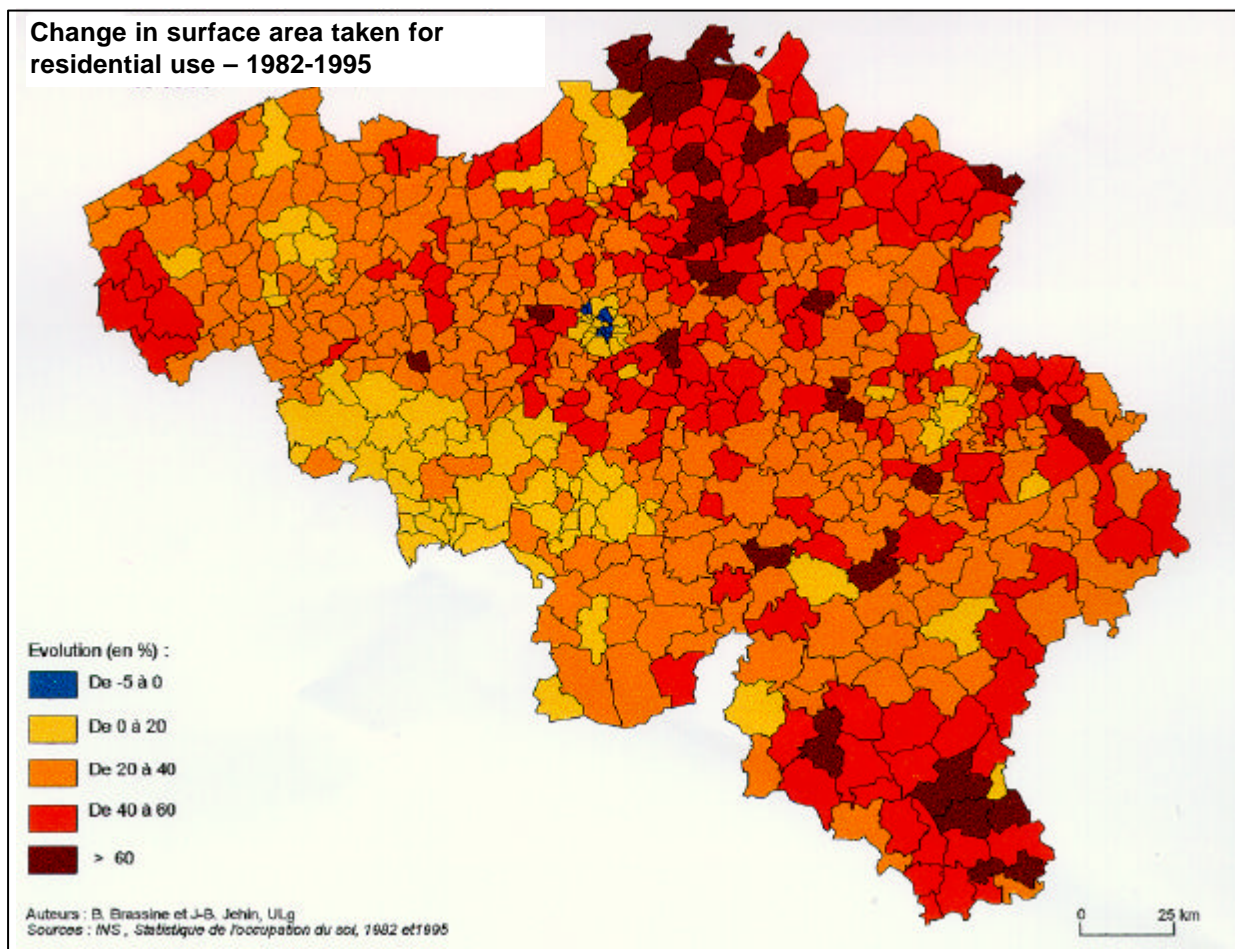
Acquisition of property is the crucial factor. A number of factors lead almost automatically to suburbanisation. In some periods, determined by fluctuations in rates of

interest on mortgage loans, buying will be more advantageous in the long term than renting. Potential builders are almost immediately sent to the urban fringe, as building land forms little or no part of the urban landscape. Buyers can find what are looking for both in the city and at the urban fringe. If someone is on the look-out for a single-family dwelling with a garden which is sufficiently large for a traditional family, the supply in the city is more limited but above all more expensive. In combination with the picture that the city is there for working and shopping in and not an environment to bring children up in, it seems almost self-evident in the Belgian context that young people will choose the outskirts as a place to live in.

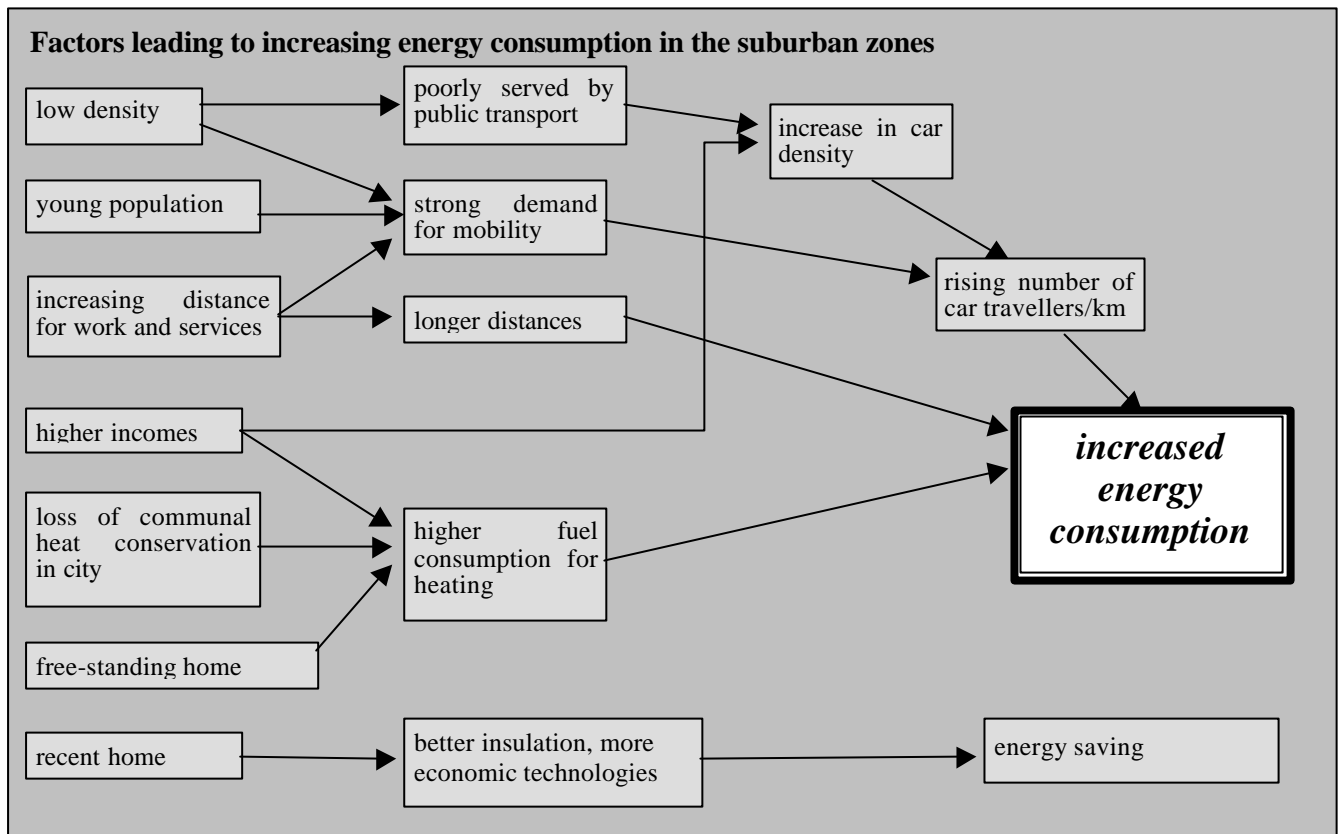
III.2. Problem points due to the suburban residential preference

III.2.1. Consumption of space and energy

A significant aspect of suburbanisation from the point of view of sustainable development is the development of the consumption of space. The increase in the population is at a far lower level than the increase in the consumption of space for residence. This means that the number of m² used by one inhabitant for residence has greatly increased. This growth is dependent on space and is greatest in the municipalities which are subject to the process of suburbanisation. It becomes clear again that the municipalities where the trend is more apparent are suburban municipalities which no longer directly adjoin the urban centres. An ever greater proportion of Belgian space is coming under pressure, particularly when it is borne in mind that there are municipalities where the surface area taken for residential use has doubled in 20 years.



It is not just consumption of space which is increasing in the suburban zones, so too is energy consumption. The consumption of energy for domestic heating is rising as these zones on the urban fringe are characterised by larger single-family homes without the benefit of party walls and the compactness of the city. In the area of transport, an increase is taking place in both the distance and the frequency of journeys.



III.2.2. The added cost resulting from suburbanisation

a. Costs due to urbanisation

A number of public facilities and infrastructure are linked to a home and its inhabitants, regardless of the location of the place of residence. Homes are served by the public road network and are connected to a number of utilities (water, gas, electricity, street lighting, communication, sewers, etc.). A number of house-to-house services are necessary, such as postal deliveries or refuse collection. In addition, there are a number of public facilities which are expected to be available locally: nursery, primary school, post office, police station and so on. As these facilities become more specific, a larger area of action becomes necessary and they shift from the local to the regional level (hospitals, secondary schools etc.).

The growth zones of the population from the historical point of view have been associated for decades with the urban environment. The cities were the growth zones. It is in these cities, as the places where the population is concentrated, that the various utility networks systematically develop. From there, these are extended into the non-urban areas. The supply of public facilities has also developed over the years, both at the local level for the inhabitants of the urban districts and neighbourhoods, and at the regional level because of the function of the city as a centre.

The process of suburbanisation is growing in relation to this background. The process comes fully into its stride from the moment when the potential for this infrastructure and these facilities is also available in the urban fringe. Construction itself takes place as a function of the expanding residential heritage. In the case of new building on newly purchased building plots, this implies the complete development of a plot into land which can be built on with the construction of all the infrastructure.

Suburbanisation leads to a great expansion of utility networks. The expansion is further accentuated by the lower residential densities per hectare in the urban-fringe zones in comparison with the urban environment. More running metres of pipes are necessary for the same number of connections. The costs depend greatly on what networks have to be provided and what the plot width is. There is a variable cost of €455 per running metre of plot width to provide electricity, street lighting, water, fire provisions, gas and roads with complete drainage. In addition, there is a fixed cost of €2070 per plot (electricity boxes, sewage treatment, water gas). An annual sum of €1 to 15 million is required in Belgium to connect new suburbanisation homes to the networks.

The new residents in the fringe municipalities, the suburban settlers, show a distinct profile. They are young families with small children. The demand for nurseries or primary education, for example, will increase. The supply will need to be adapted to the changing demand.

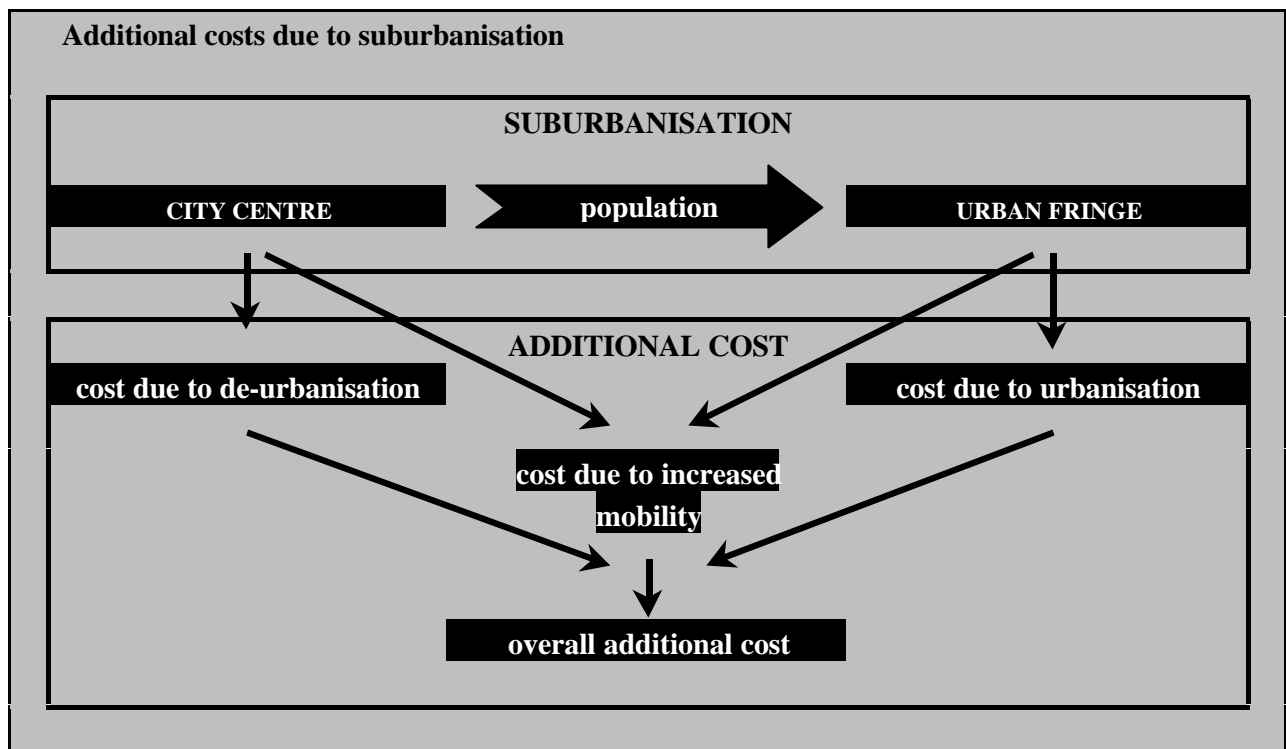
In brief, the suburban residential preference of households entails costs for the municipalities at the urban fringe: the costs due to urbanisation.

b. Costs due to de-urbanisation

When someone leaves a place of residence in the city for a place of residence at the fringe, one residential migration is made, with implications in two spatial environments. As a result of suburbanisation, a number of facilities will have to be provided for less inhabitants. It might therefore be said that costs can be reduced. Nothing could be further from the truth. The facilities themselves, and to a lesser extent the personnel in them, are tied to a place. This means that the possible saving on the costs in the cities where particular services have to start being provided for fewer people in reality is small or non-existent due to the under-utilisation of the infrastructure and facilities. These need to be maintained and will sometimes have to operate below “cost-effective” capacity. Because of their public nature, they nevertheless have to be preserved. These are costs of de-urbanisation in the urban environments.

c. Situation of the additional cost

Suburbanisation generates costs both at the place of departure and at the place of arrival. A mobility cost arises between the two spatial environments as a result of the increasing number of journeys made.



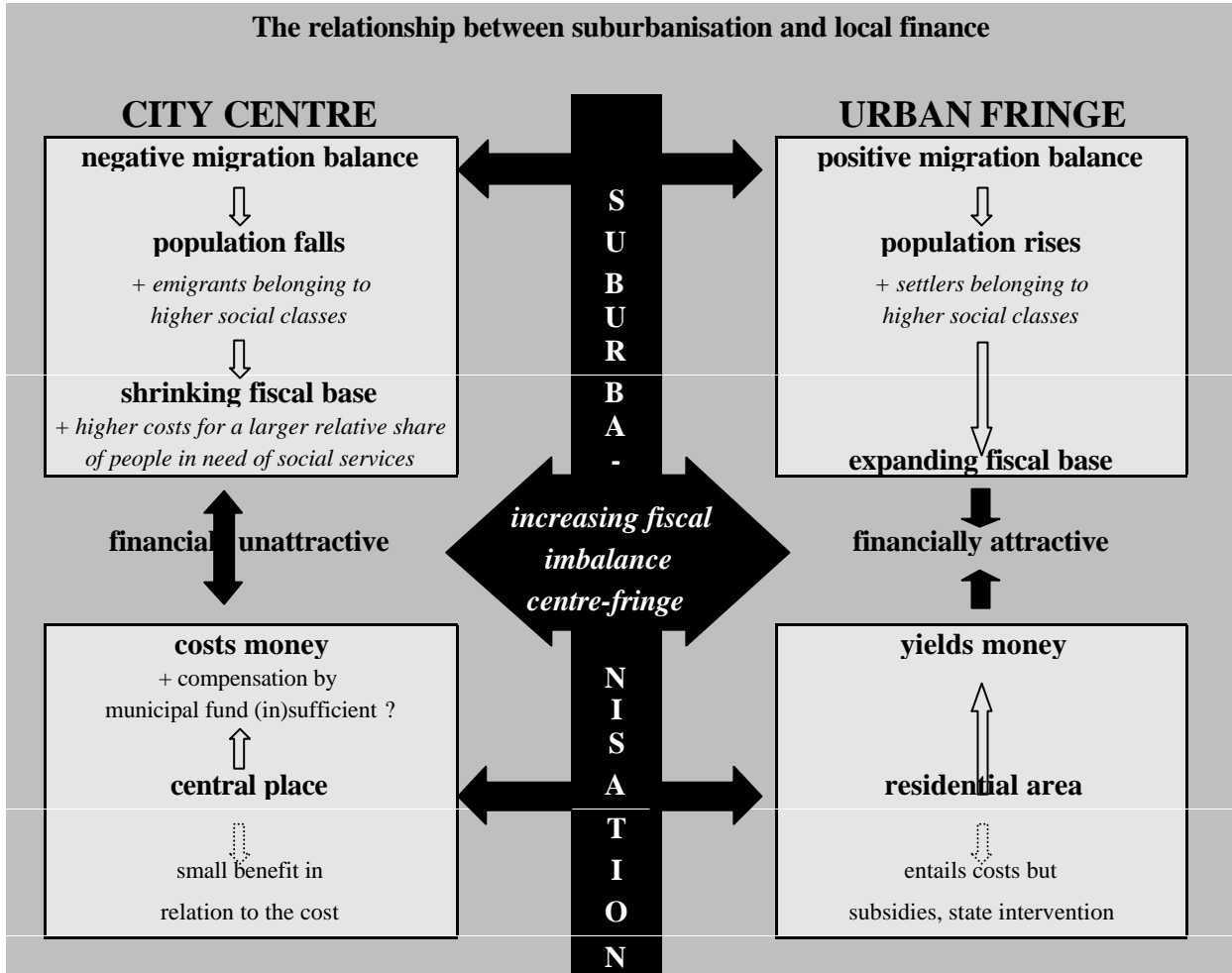
d. Who bears the costs?

The question of who bears all these costs is difficult to answer. Possible players are the households themselves, the initial owners of potential building land, the developers and those who divide up plots, the operators of utility networks, the taxpayer, the municipalities, the regions and finally the community as a whole. Both the private and public sectors are involved. A characteristic feature is that the costs constantly shift between the possible players. Estate developers pass on the costs of starting up the division of land into lots in the sale price of the lots and shift a proportion of the costs onto the households. Distributors of networks pass on expansion costs in their unit price for the service they later provide, the cost in itself being collectivised as the whole community will pay the same unit price. Municipalities make use of all kinds of funds provided by higher levels of government where feedback is obtained at the highest level to the lowest level through taxation and charges and the costs are again collectivised.

e. The position of the municipalities: increasing financial disparities

The municipalities occupy a prominent position. They are responsible for providing public facilities and deal with the financing of these facilities (both the investments and continued operation), specified in the municipal pattern of expenditure. It is clear that this is determined differently for a city than for a non-urban municipality because of the centre function of a city. The cities fulfil their role as a central place, but providing urban centre functions costs a considerable amount of money, where income fails to match expenditure. The principal difficulty is that the centre functions are used by both the population of the city itself and by the inhabitants of a wider area, while the costs (because of the structure of municipal revenue in Belgium) can only be recouped from the city's own residential

population. This is reinforced by suburbanisation. The number of inhabitants in the part of the area of activity outside the administrative boundary of the city increases and decreases in the city itself. The cities are compelled to recover their municipal revenue from a shrinking population, the economic characteristics of which are additionally becoming weaker because the flight from the city takes place selectively.

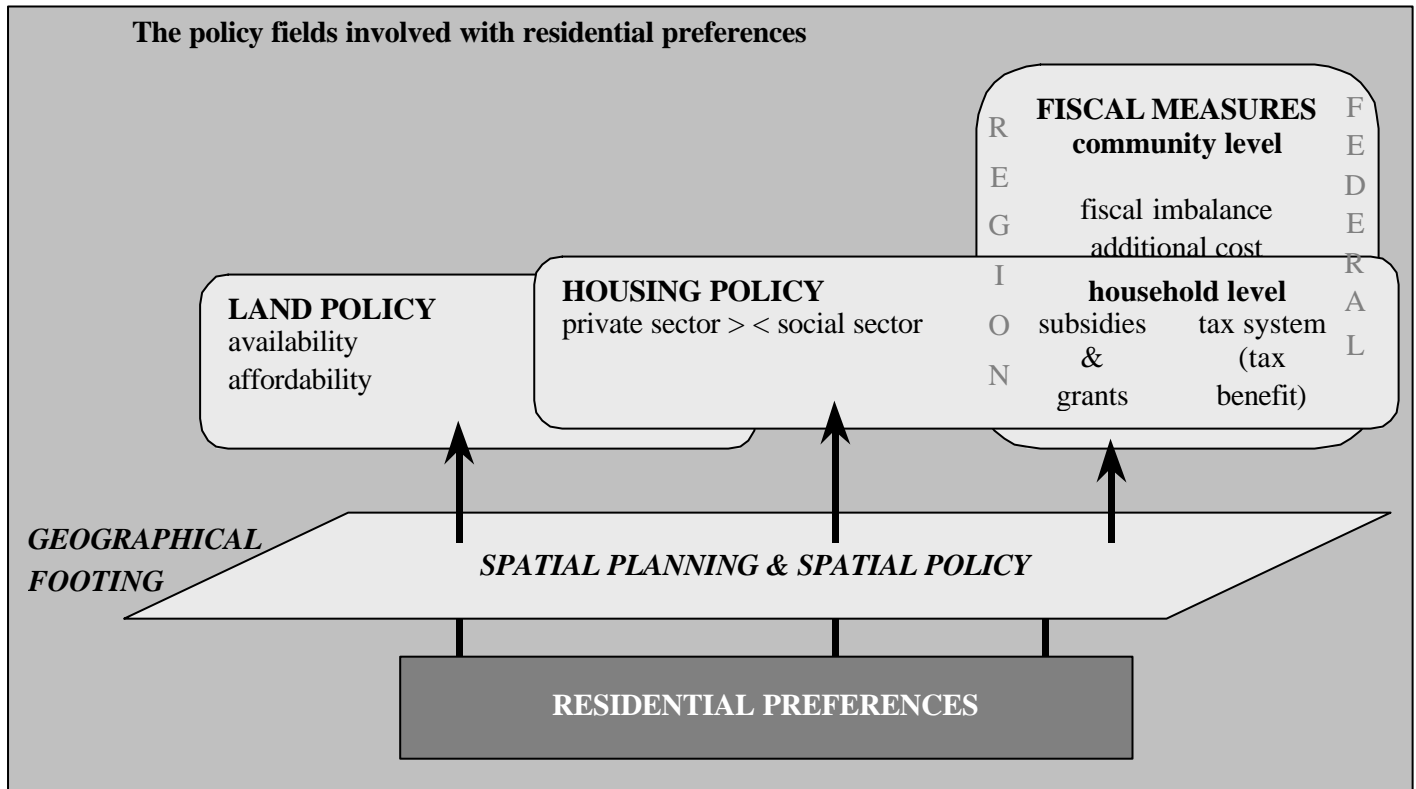


The suburban municipalities are seeing their fiscal base growing because of the same process. Most municipal revenue comes from local tax revenue on the basis of income and property. Both are increasing because of the influx of new inhabitants and expansion of the residential heritage. These new inhabitants who are the party demanding new and/or additional facilities also generate costs. On the basis of quantitative figures based on interviews with municipal recipients, however, it is repeatedly found that revenue exceeds expenditure and the suburban municipalities regard suburbanisation as financially attractive. The cities receive compensation for providing centre functions through the Municipalities Fund. This compensation is inadequate. The whole process of suburbanisation results in increasing fiscal disparities between the city and the urban fringe. It is becoming difficult for the cities to conduct an effective policy which can slow down suburbanisation on the basis of a deteriorating financial situation.

III.3. The role of policy

Belgium has a long tradition of suburbanisation. The process began quite early on in comparison with countries around us, has taken hold over the years on a large part of Belgian territory and has actually never been impeded by policy.

A number of policy sectors are directly involved in the residence choice of households.



These sectors are closely interwoven. Spatial planning determines the geographical footing and has an impact on the availability of building land and therefore also on the determination of price in relation to supply and demand. There must be a clear vision through spatial planning on the arrangement of our space. What functions are desirable at what locations? The past plays a governing role. The building zones on regional plans represent, as it were, an invitation to live on the urban fringe. Present policy is grafted onto the heritage from the past where an overall vision on the spatial arrangement at national level was lacking. The desired spatial structure as the putting into practice of this vision must also be grafted onto the existing spatial entity.

The government has another directly involved approach through the housing policy conducted through both the public and private sectors. The private sector dominates in the Belgian context. Government involvement through the public sector is very limited, so that the suburbanisation-checking mechanism falls by the wayside. By using grants, subsidies and fiscal measures, the government through its residential policy supports private property, which is almost always associated with new construction. In this way, the suburbanisation model has been promoted since even before the great wave of

suburbanisation after the Second World War. The emphasis on acquiring property was and is very great. In addition, there is hardly anywhere discussion of spatial differentiation or dependence on location in the policy conducted.

Land policy can play a regulating role together with housing policy. The Belgian government disappears from the stage in the field of land policy. There has never been such a thing as active land policy in Belgium, and there is no potential mechanism regulating suburbanisation.

The field of fiscal measures is not just involved at the level of the households, where it is completely interwoven with housing policy. At the social level, there must be a policy for approaching the problems of additional costs and the fiscal contrasts.

The great autonomy of the tax system of the municipalities does not just result in growing fiscal disparities but also makes greater inward migration financially attractive. In many municipalities, financial aspects take precedence over spatial aspects. Belgian policy to date has fostered suburbanisation.

III.4. Policy recommendations

The government has become aware of the negative consequences which the flight from the cities can bring with it. The rate of growth of the area built on is high, social disparities are accentuated, the roads become clogged up and the financial situation of the cities becomes untenable because the financial footing is undermined, and so on. In order to limit the urban expansion and urbanisation of the outer area, measures which bring structural changes with them are required. The aim must be a sustainable development policy which is in harmony with the other functions. The policy recommendations are elaborated within this framework. They are linked to the policy sectors concerned.

a. Spatial policy

In the area of spatial planning, Belgium has conducted an inefficient policy for decades. In other countries where there is a stricter policy, it has never been possible to hold back suburbanisation, but it has been possible to structure and direct it. We retain from the approach in these countries the significance of the presence of a plan concept, going beyond the local level and operating on the basis of structural planning. Other elements are the speed at which it is possible to respond to new social dynamics and the putting into practice of plans and concepts. Spatial planning is also closely related to land policy and housing. As the input of the government is greater, so too is the potential for working in a regulating manner with respect to suburbanisation.

This means for Belgium that the residential need in the short and medium terms must be spread out. The line structures characteristic of Belgium in the form of ribbon development must be abandoned in favour of more compact concentric structures around central points. Inward expansion and deconcentrated bundling must be principles. This agrees in essence with the new orientation which, it is intended, will be given to spatial planning. The changes are such that the new approach and elaboration

on the ground can only be put into practical form in the medium term. The challenge consists in retaining the lines set out and even strengthening them, not weakening them under pressure from lobbies. The transitional period must be kept as short as possible. At the same time, there must be an awareness creation campaign to make public opinion aware of, and familiar with, the new and tighter role spatial planning will play in our society.

This new and tighter role is essential, but it is necessary to be aware of the fact that spatial planning as a policy instrument actually plays a modest role itself in the decentralisation process. The outlines of spatial policy alone cannot greatly influence suburbanisation migration as the most important expression of the process of decentralisation. Households will always continue to migrate from the city to the fringe. Tighter spatial planning policy will merely guide them more strongly towards desirable sites.

In order to be able to influence suburbanisation migration in a positive sense, it is necessary to respond to the reasons for and attractiveness of the process. The push factors are concerned with features of residence and negative features of the environment at the place of departure. Among the motives for settling, everything turns on the fact that an *affordable* suitable home has been found at the urban fringe. There is a group of suburban settlers who wish to continue living in the inner city but move to the fringe because of the prices in both the purchase and rental markets. Today the urban residential climate in housing policy is not supported differently than in non-urban areas despite the decline in attractiveness.

b. Housing policy

Housing policy has never been of priority importance in Belgium. The market is determined by the private sector and by the property sector. The share of the social sector and therefore of government involvement is small and insufficient in comparison with surrounding countries. An attempt has been made in recent years to increase the supply in the social sector, and property acquisition in the private sector continues to be supported.

From the point of view of suburbanisation, subsidy policy is the governing factor. Work must be done on a spatial differentiation between the allocation criteria to make particular sites more attractive. Thought must be given in particular to property acquisition and renovation of urban homes.

The grants or subsidies acquire more of a motivating character in the residential pattern of choice if they are sufficiently high. Income remains the determining factor. This is in contrast to the subsidy policy conducted, where the granting of subsidies is aimed at a broad target group with low financial intervention per household. In this way, a large amount of money has to date ended up with households which actually do not need, it although there are income limits which determine access.

Households gain the greatest benefit not from subsidisation but from a number of fiscal measures linked to residence. All households with a mortgage loan are entitled to tax relief regardless of income. The higher the income or the investment, the greater the benefit. It is here that extra support is given to suburbanisation, particularly when it is borne in mind that transport between home and work can also be charged against tax. In Great Britain, tax relief linked to mortgage loans was abolished in 2000.

c. Land policy

The property sector has acquired a strong position due to the absence of a land policy and strong focus on the private sector of the housing market. Measures must be taken urgently so that the government itself has a sufficient say in the market. It is necessary to abandon the idea that open space is an inexhaustible stock of potential building land which can be developed provided the correct price is paid.

d. Public finances of the local boards

Housing policy does not provide for urban renewal subsidies or extra intervention for the purchase of a home in an urban environment. If the cities themselves want to, they cannot put any financial resources into measures to increase their attractiveness and weaken suburbanisation. Precisely because of suburbanisation, the financial position of the cities has greatly declined and no funds are left to provide extra support for the residential climate. This is the result of the high degree of fiscal autonomy of Belgian municipalities.

The Flemish government has plans to rectify the lopsided ratios between poorer and richer municipalities by a redistribution in the endowment of the Municipalities Fund. As long as the balance remains positive for the urban-fringe municipalities, the urban-fringe municipalities will not be inclined to weaken the influx of suburban settlers. Another path towards a solution may consist in disconnecting the collection of the supplementary personal income tax (APB) from the municipality of residence to the benefit of the municipality of employment. Commuters then take their income with them from the place of employment to their municipality of residence, but through the APB leave a form of compensation behind for use of the services and facilities linked to their professional activity. The impact of a measure of this type is quite substantial.

Gain and loss in collection of the supplementary personal income tax (APB) in the municipality of work instead of in the municipality of residence		Large cities	Suburban municipalities
active residential population (1991)		659 052	526 977
population in employment (1991)		1 137 442	279 642
commuting balance (1991)		478 390	- 247 335
municipal revenue (ordinary service) (1994)	x 100 000 €	31 712	8 527
APB yield (1994)		2 910	2 048
hypothetical yield of APB according to employment		5 022	1 087
difference between real and hypothetical yield		2 112	- 961
proportion of difference in total av. revenue		+ 7 %	- 11 %

It can be seen from the above table that if the supplementary personal income tax was collected in the municipality of employment, serious shifts in budgets would occur. The suburban municipalities would see their revenue decline by around 11%. They have a great many commuters among their inhabitants who would contribute through their income to the municipal revenue, through their residence. The large

cities would see their total revenue increase by around 7%. This increase in relative terms is less large in comparison with the decrease in the suburban municipalities because the proportion of the APB in their total package of revenue is substantially smaller.

The idea behind these potential shifts is to reduce the increasing fiscal disparities and improve the financial position of the cities. By slowing down the financial drain from the cities, they gain a better basis for fulfilling their centre function but also for improving the urban residential climate and slowing down the flight from the cities.

e. Taxation system and land use

Financial and fiscal aspects are involved at different levels. They can weaken financial disparities but can also fulfil a regulating role depending on land use. Thought is being given in particular to registration fees and VAT rates.

Registration fees in Belgium are at a very high level. Many Belgians own their own home. A large proportion of them take part in the process of suburbanisation and acquire their own house at the urban fringe. When they afterwards plan a new house move, they face the fees which have to be paid on any sale and/or any new purchase. The high sums associated with this impede the mobility of migration. Certainly if it is borne in mind that the participants in the first waves of suburbanisation, who were around thirty years of age at that time, have now reached retirement age, the high registration fees are a limiting factor. These families where the children have left home continue living in homes which have become too large at the urban fringe which in this way do not become free for new suburban settlers.

It has already been found in the past that a reduction in VAT rates has an effect on the intensity of building. A VAT rate of 21%, 12.5% or 6% makes a great difference in the construction or renovation budget. This measure has never been linked to spatial location of the home. If this were to be the case, sustainable building sites or renovation could be promoted and spatial policy could also be supported where appropriate.

IV. USER PERSPECTIVES AND APPLICATIONS

..... ON THE WAY TO A SUSTAINABLE SOCIETY

The policy options have been drawn up on the basis of the problem of residence and demarcation of residential zones in relation to sustainable development.

At some time, other functions and activities will be encountered. It is highly plausible that policy options drawn up on the basis of different fields and approaches will have to be weighed up against each other in order to counteract opposition and promote cohesion.

The policy options within this project have been drawn up with clear objectives in mind.

It goes without saying that they must be examined by lawyers and other specialists for the practical feasibility within existing legislation.

The policy options must result in a re-orientation and adaptation of the instruments present in order to check the process of suburbanisation and guide the usual perceptions in the direction of a break in trend with the past. It is of great importance that this break with the past is fitted into the present time frame.

This is not simple when it is borne in mind that the idea of suburbanisation is a very strong element which is influenced particularly by economic factors. In times of economic recession, suburbanisation is not abandoned but deferred until the economic situation improves. Restrictions in the household budget are dealt with for example by cutting back on the size of plot or building at a greater distance from the city on cheaper sites. In addition, the present generation of builders was born when suburbanisation was already a general reality, and some of them will have grown up in a suburban environment.

It is of great importance to estimate correctly the social consequences of various potential measures.

Flight from the cities is a selective process on the basis of economic variables. Income position largely determines who can take part and who not. In this way, suburbanisation has contributed to social inequality between different spatial environments. That is the reason why positive discrimination is important in devising policy options. The positive trends must be emphasised rather than criticising the negative trends, and it must be ensured that the measures taken do not reinforce social inequality.

Political, social and economic relationships are very important for giving substance to the concept of sustainable development. Substantial changes only take place if changes occur in the value judgement and behaviour of those involved.

Those involved include not just the households with their residential preference but also the policy people who supported suburbanisation for years through the policy which was pursued. Changes of value and behaviour are a very difficult step to take, where sufficient time must pass. It is often necessary to make an about-turn in policy and aim for a break in trend with the past. Today, many people are becoming aware of the importance of a healthy environment to live in, and perhaps change their shopping behaviour through increasing environmental awareness, but nothing essentially changes in their lifestyle. People appear to fall back on a kind of instinct to preserve their

own environment even if it is at the cost of someone else's environment (the NIMBY or "not in my backyard" attitude). People are dissatisfied with the decreasing mobility but increasing traffic congestion is accepted as long as it does not affect the freedom and comfort of their own cars. Changes in behaviour and lifestyle are difficult to set in motion, not just at the level of households and individuals but at every scale level. Account must be taken of the social background in drawing up policy. It is often necessary to make an about-turn in policy and aim for a break in trend with the past. The changeover must not take place too abruptly, however, so that the process of acceptance will run smoothly. Social acceptance must form an essential part of the assessment process aiming for new lines of policy.