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From scarcity to abundance? The EU agricultural policy and the consequences for the availability of land for urbanization

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Abstract: *Most often, urbanization is seen as a process, where the built environment is gradually absorbing the open space. Focus is on the quality of the urban development, and often not the quality of the remaining land. Planning is in charge of handling the scarcity of the land resources and the conflicting interests and claims on land.*

In a European context, land for agricultural purposes is considered important and given a priority over many other categories of use. The philosophy is that there should be a supply of foods for the population at any time, and that the agriculture should be kept in a state and given proper opportunities to ensure this. In more recent years, the agricultural activity is seen as a supplementary remedy to ensure proper living conditions in rural communities.

The recent enlargement of the European Community and a general globalisation of the markets for food are contesting the traditional agenda for agricultural policies. Simultaneously, food production is undergoing very rapid structural developments. Indirectly, the working concepts for planners are likely to be affected. In a quite near future, planning will have to handle not scarce land resources, but an oversupply of land resources that have to be put into sustainable use for other purposes than agriculture.

The paper provides an overview of the present EU agricultural policies and the agricultural business' response to the economic and political conditions. The paper translates this into an analysis of the challenges that planners are likely to meet.

Introduction

Reallocation of land previously in use for agriculture to other purposes has always been a main ingredient in planning (Bruegmann 2005; Owen and Cowell 2002). Much planning theory is addressing the nature and process of the expansion of the space available for a variety of novel uses such as housing, industry, transportation, infrastructure, leisure etc. Concepts, tools and design ideas emerge for planners to apply to specific areas and sites.

In parallel, planning is addressing the transformation of existing urban areas. The restructuring of former industrial areas to housing, business and leisure districts is on top of the agenda in most towns, speeded up by the manufacturing industry's outsourcing, downscaling, and change to "lean" concepts. In this process, quite considerable spatial resources have been liberated, allowing for a higher density of activity within the present urban boundaries and, potentially, achieving higher living and working qualities (Deckker, 2006).

A general mainstream planning paradigm is consolidated with much consensus across political, economic and professional actors. In brief, the paradigm is the following: Open landscapes and areas used for agriculture and forestry should, as far as possible, be reserved for these purposes, and any infringements should be guided by the greatest care and the practise of the strictest economy. Uncontrolled urban sprawl is a danger for well functioning cities and

towns in terms of efficient infrastructure. Urban sprawl is also a potential conflict in relation to rational agriculture, and it may compromise the protection of nature and environmental resources.

This paper seeks to reassess and discuss the continual value of this planning paradigm. There is a focus on the implication of changed agricultural policies, which may lead to changes in planners' practice.

European agricultural policies

In a European context, the planning paradigm is largely in congruence with long lasting traditions of common agricultural policies. Born 50 years ago the founder members of the EU had not long before emerged from a decade or more of sharp food shortages (Brouwer and Lowe, 2001). Accordingly, the Common Agricultural Policy (CAP) began by subsidising production of basic foodstuffs in the interest of self-sufficiency. It was essential to promote a rise in the volumes and to enhance the productivity of food production, and simultaneously to protect the most valuable arable lands from a too massive invasion of other activities.

It was beyond questioning that Europe should be able to "feed itself" in case of a repetition of major war or other catastrophes. To this end, the stabilisation of the incomes and living conditions for the farming population was, of course, essential. After the war, the urban areas became attractive for the youth seeking higher incomes and jobs in other sectors. The mechanisation of agriculture went hand in hand with a depopulation of rural areas. But the main intention of keeping an intact agricultural alert remained unchanged (Greer 2005).

Under these circumstances it seemed logical to subsidise the farmers by linking support directly to the output. This was a clear incentive to promote growth in the production and thereby incomes, which was generally needed and wanted. However, in subsequent years, the incentives became so efficient that overproduction became a major problem, leading to the needs for intervention purchase of crises-ridden products. Another evident side effect was that the high prices attracted exports from outside the EU-region (Robinson, 2004). Persistently, the European policies had to be supplemented with heavy import restrictions and tariffs.

Since the early inception, many minor reforms have been undertaken of the CAP. The sustainability has been challenged because of critically increasing budgetary pressures and the imbalances of supply and demand. In later years, i.e. after 1992 and 2000, the reforms took into account that the environment was affected negatively by a mere output-oriented agricultural policy. Complementary measures were laid into the policy, measures that were meant to discourage some categories of production. Eventually, as a response to the depopulation of some rural areas in Europe, measures were introduced to revitalise and to promote other types of jobs and incomes, for example services, manufacturing industries, and tourism. (European Union, 1999). Still however, up until 2006, the vast majority of the EU budget has been allocated to the direct subsidies to farm products, in spite of the promoted intentions: "leaner, greener European model of agriculture with contented consumers, cleaner countryside, competitive farmers, and stable spendings", which is the wording in the Agenda 2000.

After 2000, external factors have put even heavier pressure on the CAP. The recent policy changes reflect the enlargement of the Union from 15 to 25 member states. The previous model is loosing its economic feasibility in a Europe with a higher diversity of structural features and more profound and complex rural difficulties, which characterize the new member states. In addition, the WTO and other free trade promoters were not happy with the protection, arguing that the European consumers would benefit in terms of lower prices from an opening of the market, and developing countries should, for their own development's sake, also be allowed to compete on more equal terms. These points of view also found quite some political support in Europe. In addition, confronted with the EU budgets, where agricultural subsidies still accounted for the absolutely largest share, European taxpayers began to find that the community as such might get better value for money by other budget allocations.

The most recent reform inaugurated in 2003, which is under implementation, breaks one of the previous founding principles in the agricultural policy. It aims at an efficient "decoupling": subsidies to rural areas and the farming population shall no longer be linked directly to the agricultural production, but rather be provided to the single farms based on other criteria. The aim is still to create fair living standards and to maintain viable rural areas, but the farmers will be freer to produce what their markets demand. Thus, the innovative and competitive potentials in farming will be enhanced, while, at the same time farmers will be given a basic standard income guarantee, under the condition that animal health, food safety, and other requirements are respected. In addition, larger proportions of the EU agricultural budgets will be dedicated to environmental, cross-complying measures, and the rural actors – including the farmers – will be invited to participate. Simultaneously, parts of the trade protection and market policies concerning for example sugar, cereals and other commodities are levelled dramatically down.

The historic fear for food scarcity is not completely vanished. One of the "cross compliance" requirements is that subsidised farmers are obliged to keep the farmland in good agricultural and environmental condition.

Likely implications of the CAP reform on the rural areas and the landscapes

There is hardly any doubt that the reform, in due time, will cause a changed focus in agricultural holdings, in the food manufacturing sector, and in all agricultural-related industries and institutions. However, the level of subsidising will remain high for quite a period of time, and therefore changes will not take place overnight (Wilson 2001, Parris 2002). The implementation methods, where farmers are allowed time for adaptation, are likely to prolong the transitions. In a restructuring period, the subsidies to farmers are depending on the subsidies previously obtained. The subsidies will decrease gradually over the years.

Because of the significant time lag in the implementation, and because land use issues are not directly part of the objectives of the CAP reform, the implication for planning paradigms and planners' practice is not self evident. Only recently the planning community and the planning academia have begun to address this complex theme.

Mainly, the CAP reform will influence the conditions for urbanization and planning indirectly. The examination in this paper will go through the following elements of the reforms:

- Affecting prices and production costs for agricultural products through new market organisations and intervention logics
- Decoupling from the local - affecting the competition due to new member states' Europeanization
- Delocalising as an effect of transferable payment entitlements
- Cross-complying agro-environmental measures
- Diversification through rural development measures.

Prices and production costs

An almost certain consequence of the CAP reforms will be a decrease in the prices that farmers can obtain for their products. The intervention prices will be lowered generally. For some products this is planned to happen very rapidly. Products from third-party countries will be allowed to enter the European market to a greater extent and at lower tariffs. However, the impacts are not uniform across categories of food products. The price reductions experienced by the farmers are depending on the world market prices, and the continual negotiations with the WTO and bilaterally with developing countries (OECD and FAO, 2005). The suggested effect is that, gradually, farmers become more adaptive to trends on the larger markets.

The farmers have been aware of this development for a number of years, and attempts to lower production costs are just a continuation of the previous EU policy incentives. Mechanisation of agricultural production and in food processing aims at compensating for lower prices by allowing the farmers and the food business to obtain advantages of scale. In most European countries there is a very rapid increase in average farm size (OECD and FAO 2005). Slaughterhouses, processing plants, and agro-business corporations are undergoing a similar concentration in size and ownership (Coleman 2004).

The landscapes have always been influenced by the prices on agricultural products. One year, some crops dominate the fields, the next the landscape has changed to other colours and textures. Larger fields, and fewer ponds, trails, hedges and fences, in combination with fertilizers and other bio-technology led inventions have, however, led to a more monotonous landscape (Parris 2004). All things being equal, this development will be enhanced as a consequence of EU-measures that systematically reduce prices on products.

An outcome of this development is that rural districts will become more dedicated to efficient production, and interference with other land use interests is highly unwelcome. The manure handling is another critical operation that can be of harm to neighbouring housing settlements. There is a considerable risk of washing out of nutrients to the groundwater reserves. Also this may be a hindrance for enhanced urban settlements in very intensively cultivated areas with a high livestock pressure.

The push for a larger-scale production may lead to a complete withdrawal of professional farmers from areas where there is a risk of continual conflicts with neighbouring activity and the constant compromises with the environment. The abandoning of village houses – or eventually whole villages - is particularly high in areas with high agricultural intensiveness in terms of livestock.

The NGOs concerned with environment and nature have raised attention to the indirectly positive impacts on the nature and environment of the EU imposed minimum prices on milk, beef and lamb. The cattle grasses marginal pastures and this is of immense importance for the maintenance of some nature and landscape types. These areas might change quite dramatically in appearance and in fauna, if farmers loose the incentives to continue extensive production methods. Optimists claim that the intensive dairy sector will be far more affected by lower prices than the extensive meat producers. This is an illustration of the complexity of the impacts. The specific implications depend highly on production modes as well as the economic composition of the regions, where this production takes place.

Decoupling from the local: Europeanization of the agricultural production

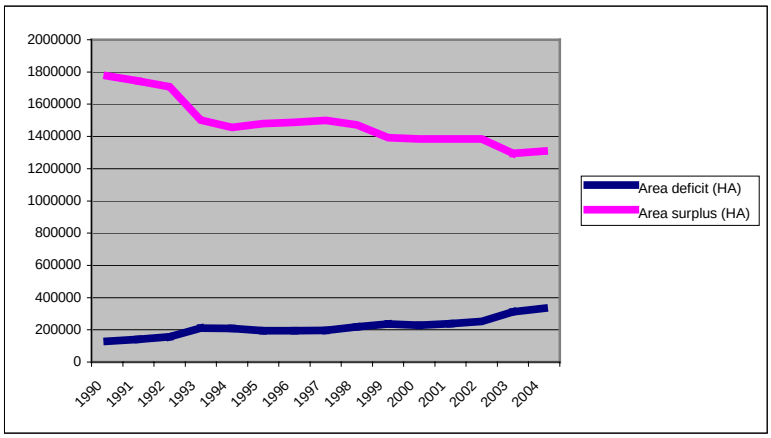
There is a quite persisting conception of agriculture as a local activity, tied to the land and the climate, and enhanced by the farmers' unwillingness to leave their inherited farm capital. Although many farmers are traditionalists and ready to accept lower incomes to remain in their home environment, things are changing. Many are considering farming as a job or a business, not a lifestyle.

In agriculture, as in other production sectors, the value chains are being remodelled (Handfield and Nichols 2002). Pig breeding, for example, is divided into sub-processes, and part of the production is relocated in separate units, even across country borders. Accordingly, primary agricultural production is not exempt from the globalisation driving forces that demand a location of the product where the costs are lowest (Robinson, 2004). This is a development that is likely to be speeded up.

Crops are still to some extent related to the livestock production. Presently, the environment-related harmonisation regulations for the disposal of manure require a continual demand for arable land, and the lower value added on the crops is compensated by the value added on the pigs. Figure 1 shows that, increasingly, farms have been in need of extra land resources to fulfil the requirements.

The gap between holdings with surplus and deficit has been narrowing – in some regions more than others. As a consequence, land prices have risen quite significantly over the years due to the harmonisation regulations, but still the global profitability of pig production is favourable in Denmark (Andersen 2003).

Figure 1: Harmonisation regulations – Holdings with area deficits and area surplus, 1990-2004



Source: www.statistikbanken.dk

Without a significant pig production, the feasibility of growing cereals in a country as Denmark would be still more amputated as a consequence of the CAP reform (Hansen 2003). Decoupling will probably lead to a quite dramatic reduction of the prices of the land in Denmark by around 70 % (Frandsen et al, 2003). It is, however, difficult to estimate the time span for this development.

The balance is subtle and continuously challenged by the decoupling. Pig producers in Northern Europe are investing in Eastern Europe, where labour and land costs are lower and the access to the larger European market is unlimited. Some producers in the pig business are moving their investment even further east in a more comprehensive globalisation strategy aimed at combating the present and potential future trade barriers (Jensen and Frandsen 2003). The processing industry is matching this by intensive trans-national mergers and acquisitions.

It may be concluded that the livestock-land balance has a limited future in the form that has become mainstream. Processing of agricultural products will have to become more efficient globally and therefore enter into an increasing division of labour based on production costs. Evidence from other sectors uniformly show that, under these circumstances, simple production processes will be outsourced or offshored. Parts of basic agricultural production are very likely to be the next in the mainstream globalisation.

A consequence will be that the pressure on land resources for intensive cultivation will level off. In many Northern European countries, the scarcity will be replaced by abundance. The positive impact will be lowered environmental impact and less need for economic schemes such as set-aside support. There will, however, emerge a need to manage land no longer occupied for intensive, large scale farming. In the near past the planning profession has been occupied with refurbishing derelict industrial manufacturing areas and introduces new uses for them. In the decades to come the task will be to find new use for derelict agricultural zones (Verschuur et al, 2003).

The transferable payment entitlements

Agricultural polices have often been accused of restricting the farmers' scope for action unnecessarily. The CAP reform has introduced a new element that liberalises by allowing the farmers to trade their decoupled EU payment entitlements freely. In other words, the subsidy privileges become a kind of capital bond, and the farmers may sell off their production rights. In principle, this system will loosen production further from the specific land resources and localities. Production can take place in areas where the highest yield can be obtained in the most efficient farms (Swinbank and Tranter 2004).

The likely impacts of the transferable payment entitlements will be an increased concentration of farming in fewer and larger holdings and in specific regions and areas. It will motivate less efficient farmers to set aside land and to launch into forestry and other less intensive use. Some areas and regions will be more dedicated to agriculture than others, predominantly those already geared hereto, and where conflicts with other land use purposes and environmental restrictions are less problematic.

Hansen (2003) claims that, *de facto,* the transferable rights are incentives with fairly marginal impacts. The argument is that, for a long period of time, the subsidy rights are so relatively widely available that farmers wanting to withdraw from crops production are hardly able to capitalise a high value, and they will only choose this strategy if under hard pressure. The perceived value of the privileges is highly depending on the market for agricultural products. As demonstrated above, this value may become bleaker over time, thus affecting the value of the transferable subsidy privileges negatively. In addition, if land is converted permanently to other purposes, for example housing or leisure, the subsidy right cannot be withheld. Accordingly, the incentive may only very indirectly speed up the transfer processes of land to other purposes than agriculture.

To conclude, the decoupled transferability measure is an instrument that can help to rationalise agricultural structures and at the same time limit public support to unsustainable overproduction, but it is possibly a weaker measure than intended.

The agro-environment measures

Already at the 1992 CAP reform, the environmental protection aims were given a more prominent place in the comprehensive EU agricultural policy. Set-aside measures were introduced. The environmental emphasis was increased in the Agenda 2000 where a range of agro-environment measures promoted for example organic production and forest plantation. Selective measures aimed at the protection of vulnerable nature types through less intensive agrocultural forms, reduced fertilization, etc. The policy focus is mainly on the aquatic environment, although also surface factors such as erosion, flora and fauna variety and landscape qualities are included. Potentially, the measures can be used for strategic protective action in particularly valuable and vulnerable landscapes, and can in some cases facilitate the recreational qualities of the landscapes (Hasler et al 2002).

In budgetary terms the agro-environment measures are, however, still a small fragment of the EU budget for agriculture, and will continue to be so up till 2013. Critics are claiming that the agro-environmental measures are still fairly "symbolic" (Robinson, 2004).

Impacts of agro-environmental measures are not yet far reaching; one important reason is that action can only be taken by the farmers/landowners themselves. Only they are eligible for the funds from the schemes. Accordingly, the potential landscape benefits may be very fragmented and dispersed, and not coordinated into more comprehensive landscape plans. The take-up of the measures is much depending on the expected economic returns, and farmers often consider agro-environmental initiatives for areas that would be infeasible for intensive agriculture anyway (Walford, 2002). In other words there is a significant "deadweight".

Nevertheless, the logic of the agro-environment is widely accepted as a welcomed breach into the traditional agricultural policies, and since 2000 there have been many hopes of an expansion of the areas where agro-environmental measures can have an influence (Brandt and Vejre 2004). The instruments may pioneer a new direction of agriculture and rural development. However, as it is now in most European countries, the activities are hardly corresponding to the potentials and needs in environmental terms. The relatively modest budgets are main reasons, but the lack of complying planning instruments is also of significant importance (Gilg 2004). The incentives are constructed as if they were subjects of a purely economic decision making at the farm level, in spite of the recognised fact that environmental problems and solutions do not respect property borders.

In many European countries we have seen numerous attempts to compensate for this inconsistency. Partnership approaches are ways out of the deadlock (Lowe et al 2000). It is widely recognized that there is a need to create new institutional structures to supplement or replace the formerly so strong and exclusive alliances between farmers' associations and the national ministries of agriculture.

New niches in agricultural production? The rural development logic

In the literature about the CAP reform there is emphasis on the effects on competition and the intensified need for farmers to reduce costs. Creating economics of scale is mostly available to the large farm holdings, and in the first run, they will come out as the winners of the race for continued profitability of agriculture. Life is expected to become harder for small and medium sized producers (Brouwer and Lowe 2001; RICS 2003).

However, some farmers and related processing industries will launch into a higher focus on value-adding and diversification in order to resist competitive pressures (Wilson 2001). Also their response to the new driving forces may have an impact on landscapes and planning. Some categories of crops and livestock are not subject to EU payments, for example horticulture or energy crops. These products will become relatively more attractive. An increased consumer demand for niche food products and regional specialities will also be of importance for emerging new businesses.

Farm accommodation and farm shops are other businesses that may be compatible with traditional agriculture. Other enterprises such as tourism and sports facilities – riding, sailing, golf

etc. – can also be of interest in relation to a rejuvenation of rural resources, although farmers show an economically founded reluctance to diversity (Hjalager 1996).

All these alternative utilizations will have consequences for land use, environment, infrastructure, and for the aesthetic appearance of the countryside. The EU and the national authorities are supporting the diversification processes by financial schemes in less favoured regions. These schemes have experienced a budgetary boost after the latest CAP reform, but as the agro-environmental measures, the funds available are still only a minor fragment of the total for EU agricultural policy.

The diversification opportunities and potential profitability are not equally distributed. Farms located in the neighbourhood of larger urban agglomerations will be more likely to open facilities. Proprietors situated in landscapes with significant aesthetic qualities can also rely on an inflow of tourists and day-trippers.

The message for planning?

There has been a considerable academic interest in the consequences of the agricultural reforms. Most of the attention has, however, been focused on the impacts for the farming sector and for the economics of agriculture and food production. The wider social and economic implications and potential damage caused by changed EU-polices are more complicated to assess, and there are immense uncertainties (Ilbery 1998). Consequently, the "relief work" to be delivered to rural areas by a consistent planning is hard to forecast with any great precision (Nijkamp and Ubbels 2005).

There is a range of messages for European planners to address. Most importantly over the next decade or two, rural areas may be logically emerging into two main categories:

- Areas dominated by the efficient production landscapes
- The rural recreational and residential landscapes

The dichotomy is not unknown from the literature, and it has raised a continuous debate among landscape researchers about "productivism" versus the "post-productivism" (Halfacree and Boyle 1998; Mather et al 2006). Some prefer the term "multicultural landscapes" thus indicating that rural areas will always have to be resources of simultaneous use by many actors (Brandt and Vejre, 2004).

Paquette and Domon (2003) demonstrate an increased disassociation between agricultural and socio-demographic trajectories. Rural areas, particularly the post-productivist landscapes, become settlement sites, but not uniformly so. The development is much depending on the combined existence of landscape qualities and proximities to urban agglomerations.

Farming will be an activity in both productivist and post-productivist areas, but of very dissimilar nature. Different premises of existence will require different planning approaches. The planning philosophy in each of these categories of areas will have to become more differentiated, in order to reflect properly the life modes and the categories of conflicts in the two types of areas. The table below outlines philosophies and challenges:

The planning challenges in the productivist versus the post-productivist paradigm

	Productivism paradigm - Planning in the efficient production landscapes	**Post-productivism paradigm - Planning in the recreational/residential farming landscapes**
Main planning mission	To prevent potential area conflicts in order to allow commercial agriculture to develop, expand and utilize the most competitive production methods, without the intervention of others	To integrate multiple functions in rural areas in order to create development synergies in terms of social, economic and environmental benefits
Location of areas	Outside urbanised and sub-urbanised zones, but areas with favourable cultivation features and in robust environments	Areas in urbanised zones and areas that are of lower cultivation value, due to landscape, environmental or other features
Environmental control	Isolation and clean-up: Damage hedging. Damage prevention or repair by efficient "cleaning" technologies etc.	Minimum impact policy: Conversion to organic production, extensification, regeneration of natural balances
Support to farmers	Payments related to output Measures that enhance productivity through (bio)technological innovations	Incentives to increase diversification into other economic activities, for example tourism, retail, small scale agro-industrial processing etc. Support to the development of regional food cultures
Residential areas	To be limited to an absolute minimum at the fringe of the areas	Integrated, allowing a good use of landscapes to enhance living qualities
Agro-related industry	Large scale agro-business can be localised in relation to the large scale farm holdings	Mixing in small scale, non-polluting business, leisure facilities etc.
Visions of landscape aesthetics	Wide plains. Scenic order.	Variation. Idyll. History. Surprise. Men and livestock. Organised chaos.
Landscaping practice	None	Landscape improvements: Managing, regenerating, protecting and supplying the landscapes, including the provision of new forests, woodlands, wetlands, lakes, habitats, landscape heritage features, etc. Preservation and enhancement of fences, windbreaks and field structures.
Planning methods	Zoning and strict planning regulations	Use of illustrative, dynamic landscape modelling, settling of general visions and projections for specific areas. Participatory micro-planning and continuous dialogue. Use of cross compliance measures.
Handling of conflict	Use of penalty clauses. Polluters pay Principles. Separation of the conflicting use	Dialogue, mediation, advisory services, best practice etc.

Conclusion: A long way to 2013 – was the CAP reform a missed opportunity?

This paper states that it makes sense to distinguish more efficiently between categories of areas where planning can be guided by a productivism philosophy from areas where a post-productivism paradigm can be applied. It is likely, that in the longer run, the CAP reform will cause an increased emphasis on the post-productivism paradigm. Freer market forces and globalisation of the main large-scale food regimes will limit the land needed for intensive mono-agriculture, and more will be available for urban or semi-urban purposes. However, it is difficult to forecast at what pace the land and areas will shift from one paradigm to the other, and which areas and regions will lead this development. Peripheral areas may experience it harder to adapt to the changed conditions than areas located adjoining urban agglomerations. New regional problems may arise.

The newly initiated CAP reform has started the development motor, but at the same time there are many brakes built into the reform. The political concern is that pressure on the farmers should not be overwhelming, and the policy changes are constructed to give them time to adapt. It is a question whether this prolongation is actually harmful for farmers in both regimes.

The agricultural sector is one of the last bastions of major direct subsidies to enterprises. Years or decades ago, similar concepts of industrial policy have been abandoned in other areas, and the shipyard industry and other manufacturing industries are given none or very little direct support. Policies have shifted to the provision of favourable framework conditions and to incentives that promote innovations and enhance knowledge. We still lack to see a policy emerging that helps agricultural holdings in both categories of productivist and post-productivist areas to raise competitiveness and renew their supply to free markets.

Reforms take time. But nevertheless, it is quite urgently needed that planners provide their views and vision for the future agricultural landscapes (Moore-Coyler and Scott 2005). It is evident that new and diversified planning methods are required. Alliances with policy makers to straighten and refocus the incentives for landowners in productivism areas and post-productivism areas respectively are prevalent. But without the backing of appropriate economic incentives and regulatory powers that truthfully reflect the economic mechanisms in operation in rural areas, planning is only likely to be a show of design skills – nothing to do with the real world.

References

Andersen, M.S., 2003, The effect of manure management regulations on international competitiveness. In: Organisation for Economic Co-Operation and Development: Agriculture, Trade and the Environment. The pig sector. OECD. Pp. 129-146.

Brandt, J and Vejre. H. (eds), 2004, Multifunctional landscapes. Theory, values and history, Southampton: WIT Press.

Brouwer, F. and P. Lowe (eds), 2001, CAP regimes and European countryside, Wallingford: CABI.

Bruegmann, Robert, 2005, Sprawl: a compact history; Chicago: University of Chicago Press.

Coleman, William, Grant, Wyn and Josling, Thimothy E., 2004, Agriculture in the new global economy, Cheltenham: Edward Elgar.

Deckker, Thomas and Healey, Patsy, 2006, Collaborative planning: shaping cities in fragmented societies, New York: Palgrave Macmillan.

European Union, 1999, Agenda 2000 – a CAP for the future, Reform of the Common Agricultural Policy. http://europa.eu.int/scadplus/leg/en/lvb/l60002.htm

Frandsen, Søren E., Birgitte Gersfelt and Hans G. Jensen, 2003, The impacts of redesigning European agricultural support, Review of Urban & Regional Development Studies, 15, 2, 106-131.

Gilg, Andrew, 2004, Policies and planning mechanism. Managing change in rural areas, Ilbery, Brian (ed): The geography of rural change, Harlow: Longman, pp 189-210.

Greer, A, 2005, Agricultural policy in Europe, Manchester: Manchester University Press.

Halfacree, K. and Boyle, T, 1998, Migration, rurality and the post-productivist countryside, In: Boyle, R. and Halfacree, K. (eds), Migration into rural areas: Theories and issues, Chichester: wiley, 1-20.

Handsfield, R.B. and E.l. Nichols, 2002, Supply chain redesign, Englewood Cliffs: Prentice Hall.

Hansen, Jens, 2003, Midtvejsreformens betydning for dansk landbrug – en kvalitativ vurdering, Fødevareøkonomisk Institut.

Hasler, Berit et al (2002) Scenarios for rural areas' development – an integrated modelling approach, København: AKF

Hjalager, Anne-Mette, 1996, Diversification in agricultural tourism. Evidence from a European Community programme, Tourism Management, 15, pp 103-111.

Ilbery, Brian (ed), 2004, The geography of rural change, Harlow: Longman.

Jensen, H.G. and Frandsen, S.E., 2003, Impacts of Eastern European accession and the 2003-reform of the CAP, working paper 11/2003, Copenhagen: Danish Institute of Food Economics.

Lowe, Philip et al, 2001, National cultural and institutional factors in CAP and environment, Brouwer, F. and P. Lowe (eds), 2001, CAP regimes and European countryside, Wallingford: CABI, pp 257-280.

Mather, Alexander S, Gary Hill and Maria Nijnik, 2006, Post-productivism and rural land use: Cul de sac or challenge for theorization?, Journal of Rural Studies, in press 2006.

Moore-Coyler, R. and Scott, A., 2005, What kind of landscape do we want? Past, Present and future perspectives, Landscape Research, 30, 4, 501-523.

Nijkamp, Peter and Barry Ubbels, 2005, Infrastructure, suprastructure and ecostructure: A portfolio of sustainable growth potentials, Atzema, Oedzge, Piet Rietvel and Daniel Shefer (eds), 2005, Regions, land consumption and sustainable growth, Cheltenham: Edward Elgar, pp 15-37.

OECD and FAO, 2005, Agricultural Outlook 2005-2014, Paris.

Owens, Susan and Richard Cowell, 2002, Land and limits: Interpreting sustainability in the planning process, London: Routledge.

Paquette, S. and Donom, Gérald, 2003, Changing ruralities, changing landscapes: Exploring social composition using a multi-scale approach, Journal of Rural Studies, 19, 425-444.

Parris, Kevin, 2002, European agricultural landscapes supply and demand: implications of agricultural policy reform In: Jonman, Rob (ed), The new dimensions of the European landscape, Proceedings of the Frontis Workshop, Wageningen.

Parris, Kevin, 2004, Measuring changes in agricultural landscapes as a tool for policy, IN Brandt, J. and Vejre. H. (eds), Multifunctional landscapes. Theory, values and history, Southamption: WIT Press, pp 193-218.

RICS, 2003, Implications for land use and rural communities of reforms to agricultural policy regimes, www.rics.org

Robinson, G.M., 2004, Geographies of agriculture. Globalisation, restructuring and sustainability, Prentice Hall.

Swinbank, A and Tranter, R.B., 2004, A bond scheme for common agricultural policy reform, Cambridge: CABI.

Verschuur, G., Prazan, J. and Lughofer, S., 2003, Protecting nature in rural areas outside Nature 2000 – the role of agriculture, Bruxelles: EEB Biodiversity Working Group
http://www.eeb.org/activities/agriculture/03.pdf

Walford, Nigel, 2002, Agricultural adjustment: adoption of and adaptation to policy reform measures by large-scale commercial farms, Land Use Policy, 19, 243-257.

Wilson, Geoff, 2001, From productivism to post-productivism .. and back again?, Transactions of the Institute of British Geographers, 26, 1, pp 77-102.