

Designing landscapes for different client groups

Abstract

Can landscape design support and influence the work on care farms and the well-being of participants in social care projects? If so, in what manner, and how can we support this as a positive interaction between people and landscape? And also: can the contribution of users to the landscape have beneficial effects on landscapes and their quality, too? In this paper examples for the designing of social farms or farm surroundings for the needs of users are presented. Although good examples already exist, further research is needed on designing landscapes for special target groups to cope with the clients needs and activities. More cases presented show the impacts of Green Care on landscape development and how these effects might be improved in order to meet the needs of people with disabilities on the farm. This makes social farming a 'win-win'-situation, integrating functions like caring for people with disabilities *and* contributing to the development of rural landscapes.

Introduction

Farming for Health focuses on two types of interesting areas in various countries: urbanised areas where the urban population benefits directly from Farming for Health initiatives and rural areas where Farming for Health contributes to the vibrancy of villages and landscapes.

Recent research has focussed on the benefits of care farms for client groups and looks for criteria to manage and organise this new type of care. We also search for the benefits of working on a farm and in outdoor spaces for the clients/patients. Often the surroundings, the landscape and the farmyard are seen as the workplace, a tool to work with. It is commonly appreciated that the presence of aesthetic elements and biotopes in the landscape can have positive effects on clients and users – a well designed landscape may contribute to the well-being of specific groups living and/or working on a care farm. Can landscape design support and influence the work on care farms and the well-being of participants in social care projects? If so, in what manner, and how can we support this as a positive interaction between people and landscape? And also: can the contribution of users to the landscape have beneficial effects on landscapes and their quality, too?

Social Farming and landscape

Throughout Europe farming contributes to social activities in rural areas. However, social farming means more: the classical economic sectors of commercial farms, gardens or landscape maintenance enterprises are broadened by providing space for recreation, education, therapy or employment for disadvantaged people. 'Clients' may include people recovering from drug addiction, psychiatric, mental or physical diseases or handicaps, the long term unemployed, people with depression or burnout, the homeless, former prisoners, old people suffering dementia as well as young people with eating disorders and disaffected young people such as those excluded from school or young offenders. social farms are not only those farms offering help or therapy for groups of disadvantaged people in need but also farms that provide education on farming and food culture and farms that aim to let clients experience the rhythms of nature such as sheltered workshops and school farms. Social farming is an element of multifunctional agriculture and an alternative to the further reduction of expensive human labour in farming systems (Keser and van Elsen 1997, Hassink and van Dijk 2006).

Against the background of European Union agricultural reform, where in future the ecological accomplishments of farms are to be rewarded and jobs on farms are to be created outside the sphere of agricultural production activity, new potential is offered for developing farming in a multifunctional manner. Several surveys on the performance of farms with regard to landscape development show that the main factors preventing them achieving more are shortages of human resources and time, together with insufficient funding. Today cultural landscape arises no longer as a by-product of farming, not even in the organic sector, but only when people work actively in shaping and developing it. This calls for lots of helping hands – an obvious contrast to increasing tendencies towards specialisation and rationalisation in agriculture. Is 'social farming' therefore capable of uniting sustainable agriculture with the requirements of landscape development?

Designing an environment on social farms

Social Farming is growing fast in Europe. Farmers in the Netherlands are motivated to invest in this area because agriculture, health and nature projects are supported by the government. It is also very fashionable to involve city people in agricultural projects for other reasons. For instance in 2007, Amsterdam started a big programme on healthy food. Sustainability is also a big issue in all Dutch cities. A wide range of different user groups are looking for farms as a place for special programmes and activities for health, welfare, education and social inclusion (Elings and Hassink 2005). The key question is whether it is necessary to set up a new farmyard

design to accommodate the different user groups and their care or cure demands. Will farmers have to invest in the redesign of their farm or farm surroundings? In practice we see that this depends on the programmes and user groups. The two examples of social farms in the Netherlands illustrate the variety of choices we can make to let landscape contribute to the health programmes on farms. They also show the impact that landscape design can have on the clients and to help them to get in contact with nature. By designing the landscape according to the wishes and demands of special target groups on the farm we can enhance the impact of social farming or Farming for Health in practice.

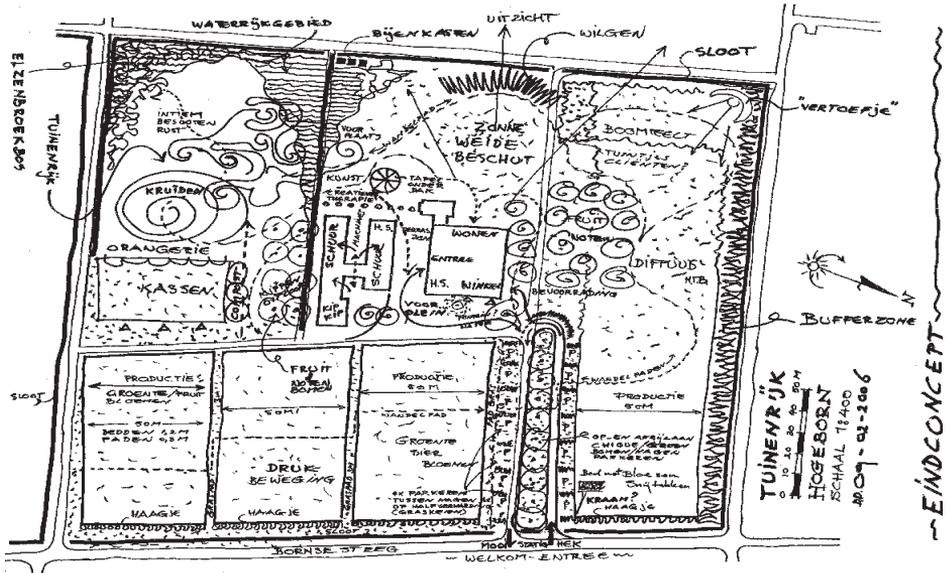
The Hoge Born in Wageningen has been working with three client groups on a 5 ha farmyard since 2004. These are people with a broad range of mental health problems (who will be living on the Farmyard from 2008 on), another group with emotional, behavioural disorders and stress related problems (mostly working as volunteers) and people with physical and mental disorders from a nearby health centre. The management of the farm project wanted to set up a mixed design for the farmyard, because they noticed different needs. The group going to live on the farm needed a separated space such as a private garden. This space could be used to relax, but also to have special activities and gardening or horticultural therapy. Other groups just enjoy working on the farm but needed a bigger space (agricultural grounds) to work on. The working groups are involved in the production of food. At the moment there are no animals on this farm but those who want to work with animals can go to another nearby farm which is only five minutes away.

So for the design of the farmyard there were three groups to please with the additional need for a beautiful farm appearance for the benefit of all visitors. For this mixed design we decided to focus on four elements:

- Divided zones with different activities for farm work, production work, garden therapy, silence and relax space, indoor work in the glasshouse, visitor area with farm shop.
- Variation in planting because not all the clients like to work in big open spaces. Sometimes clients really dislike high trees. So all of the clients could have the opportunity to find a favourite place on the farm.
- Variation in using routes through and around the farmyard. This can stimulate walking around during lunchtime and also further their interest in nature.
- Combination of field, gardens and other areas by special connecting spaces. These spaces are necessary to help different groups to meet. Not all of the groups work together. Meeting points can help people to socialise. These places were very important for the project, because the convergence of the different groups on one yard was a challenge to overcome.

The design was made by a group of workers and management of the Hoge Born supported by DieVieR counselling.

FIGURE 1: DESIGN FOR HOGE BORN



Corneliahoeve Westzaan (about 15 km North of Amsterdam): In this example we focus on a farm that works in partnership with two schools for children with emotional, behavioural disorders, autism and developmental disorders. On Wednesday and Friday mornings a group of 10-12 children visits this farm and works in groups together with the farmer and two teachers from the school. They have special tasks to perform in the barns and on the farmyard. It is a dairy farm, but for the children they also have some other animals such as three horses, some goats and sheep, rabbits and chickens. Also the two dogs and three cats get a lot of attention from the children.

The morning programme starts with changing into working clothes and putting on their boots. Then the children will choose which work they want to do and start it. After one and a half hours they take a break. Then they go into the fields together and have some fun (jumping over ditches, or riding on the tractor with the farmer) or help with special activities like counting the cows.

Becoming an educational farm for children should not be in conflict with the routine daily farm work. Although the children enter the farm schedule, they need some special spaces for their own tasks. So some changes in the farm yard had to be made to accommodate the children. One barn was

FIGURE 2: CHILDREN ON THE CORNELIA FARM (WESTZAAN/THE NETHERLANDS)



changed into a lunch area; a petting area was made where the smaller animals are kept; some new fences were erected to protect the children from running on the road and new planting elements were developed for some exciting greenness. When we observed the children's movements on the yard we noticed that they moved very freely. They work and play at the same time. They look for hiding places and nice wild looking places and green areas that are not so well kept. The farmers have left some small spaces for the children to explore. Most of the changes made are for the safety of the children and clean pathways, fences and well ordered working spaces are necessary.

Farmyard design for children should be focused on

- low risk on the farmyard (avoiding accidents),
- diversity in attraction (green, animals, plants, playground),
- variation in work places,
- using attractive plants, grass and field elements.

The University of Minnesota gives some advice¹:

- make all entrances welcoming and child-friendly,
- provide differentiation of spaces for pre-adolescent / adolescent groups, if appropriate,

¹ Sulis website <http://www.sustland.umn.edu/design/healinggardens.html> (last visited 21 January 2008)

- provide a comfortable social environment with plenty of places for parents and staff to sit and share the space with children.
- provide as many options as possible for children to interact with nature through their senses and/or hands-on activities.
- provide opportunities for planting and harvesting.
- provide a range of appropriately scaled, accessible multi-purpose settings for hands-on activity as well as for social gatherings of different types.

However, for most children the farmyard is special enough. Farmers should therefore not be afraid to have them in the yard and in most cases there is no need for major changes.

Further research is needed on designing for specific target groups. We have to look at the clients needs, mixing of groups and the activities that will take place. To learn about design of farm yards for specific groups we can learn from practice and research that has been carried out for 'healing landscapes' or designing for healthcare facilities. Cooper Marcus and Barnes (1999) have published overviews about the therapeutic benefits of special designed outdoor spaces. They emphasise that we should appraise outdoor spaces in medical settings. More and more farms will become places where special care and therapy takes place, so we have to apply design rules here as well. Ulrich (1999: 36) highlights that gardens should

'convey a sense of security. If design or locational characteristics of a garden engender feelings of insecurity or even risk, the setting will likely have stressful rather than restorative influences, and many patients, visitors and staff will avoid the space.' (Ulrich 1999: 36)

This is what we have to look for, what kind of design solutions can we give to design spaces for groups with special needs? It would be worthwhile to have more studies on this topic and to look at the structure and organisation of farm yards. Therefore we also should include studies by other sciences such as applied psychology - for instance the work of Terry Hartig in Sweden² and other health studies in relation to the influence of nature.

We also have to look at the debate between a beautiful (artificial) farmyard versus an efficient farmyard. In practice this debate coincides with the differences between health farms specially set up for health services against working farms developing health services as an additional venture. The health focussed farm will be much more involved in designing its yard because the emphasis is on therapeutic activities as a whole, whilst the

2 <http://www.ibf.uu.se/artiklar/2008/terry.html> (last visited 8 January 2008)

working farm will only redesign if it is beneficial to the new client group programme. We have to consider that a well designed yard can contribute to the beauty of the landscape.

On a large scale the surrounding landscape of a farm was 'designed' by using landscape elements like single trees, shrubs, hedgerows, ponds or stonewalls. Restoring and redesigning the large monotonous and cleared fields of today can integrate such historical ideas, in order to reach such goals of high biodiversity, an attractive image of the landscape and also an atmosphere for people living and working which contributes to their wellbeing. This makes the 'ornamented farm' quite relevant for aspects of multifunctional land use even today (Friede and van Elsen 2007).

Effects of social farming for landscape development

Landscapes of social farms

Does Green Care as such have an impact on landscape development, and how can this effect be improved?

A research project in Germany focused on investigating practical approaches and the nature conservation potential of farms in developing cultural landscape. Case studies were carried out on 16 selected organic farms that try to improve their impact on nature and landscape using a bottom-up approach (van Elsen et al. 2003). The farms chosen are examples of cases where farmers care for biotopes or integrate measures of nature conservation by their own choice and who are mainly motivated by intrinsic reasons. Within the project the traditional family farm was the exception and farms that also pursued social aims were the rule. A wide range of different landscape activities was implemented on the 16 farms, including care for biotopes, but also care for diversity within the fields and grasslands. Discovering that there were different farms with care activities among the group lead to further questions: Is there an impact of Green Care on the development of different landscapes? Would the landscape development have been the same without the presence of the Green Care clients?

A good example of the synergy between social agriculture and development of the natural surroundings is provided by Surcenord Farm (Alsace, France), an organic grassland farm founded in 1978 which keeps cattle. The farm is situated on about 100 ha of largely sloping land at 850-1140 m AMSL above the parish of Orbey and Weisstal in the Vosges (cf. also Köppl and van Elsen 2005). It is managed as pasture and mowed for forage. The livestock comprises 25 cows and calves, about 20 beef cattle, 10 heifers and 10 horses. The products sold are meat, wood and woodchips. In 2004, the subsidies,

which include state support for integration of the disabled, comprised 44% of turnover. Surcenord Farm forms part of a remedial educational institution with several residential homes and workshops. Fifteen young people with learning disabilities aged between 15 and 27 receive instruction and therapy (riding, art therapy and eurhythm, a moving therapy), work on the farm and undertake domestic duties. The two farmers place the land and the farm facilities at the disposal of the educators and carers. Some seven or eight of the young people at a time, always accompanied by educators, are involved in the farm work, which mainly comprises work in the cattle sheds, harvesting fodder, woodland management and landscape care as well as the maintenance of fences and traditional irrigation systems.

The managers of Surcenord Farm are working to open the landscape, which in areas has become scrubby with broom, by planned clearing. Farmer André Frommelt stressed that they are of course not trying to revert to the 'monotony' of the bare hillsides that were there at the end of the 19th century, but rather they value a 'diversity of habitats' on the land they manage and are striving to 'maintain and further develop' them. During tree-felling, individual pines, firs, rowans, junipers, dogrose and whitebeam are preserved. The fellings are used in the woodchip central-heating system which meets all the heating and hot water requirements of the living accommodation and the farm buildings, using some 3,000 cubic metres of fuel annually. The farmers are looking for opportunities to make a wider circle of people sensitive to ecological issues.

SoFar case studies

Within the EU project called SoFar (Social services in multifunctional farms – SOcial FARming) the FiBL (research institute of organic farming) is focusing on the components 'social farming – development of nature and the cultural landscape'. Several Green Care farms were investigated as case studies. A special focus was put on their multi-functionality. Some examples (Kalisch and van Elsen 2008):

Community Bingenheim is an anthroposophical institution established in 1950 situated north of Frankfurt with a school and workshops for more than 200 people with learning disabilities (WfbM – Werkstatt für behinderte Menschen). The biodynamic farm includes 12 disabled people with a supervision ratio of 1:3. On about 100 ha with 55 ha arable, cereals, forage crops and potatoes are grown. There are 40 milking cows with offspring and 5 sows producing young for fattening to be looked after.

The landscape is well structured with an average field size of 2 ha and is diverse because it is situated in the transition zone between hillside and valley. The soil around the farm is shallow and dry and pastures with low

yields are grazed. In the past there was a strong awareness of landscape work, especially as regards the concept of the farm as an 'organism', with planting of two kilometres of hedges and individual trees and care for around 5 ha of apple orchards.

Community Gut Sambach is situated in the former East Germany (Thuringia) and was established in 1991. It is smaller than Bingenheim, is independent of WfbM and integrates 24 disabled people into its agriculture with a supervision ratio between 1:3 and 1:6. The farm is biodynamic and has 530 ha of which 380 ha is arable land. Here too cereals, forage crops and potatoes are grown. There are about 150 milking cows and the offspring are raised and fattened. The pig stock consists of 200 fattening pigs and sows.

The landscape in Sambach is composed of fields up to 30 ha, tree-lined ditches and rows of trees - very old coppiced willows provide especially valuable habitat - as well as 12 ha of apple, plum and pear orchards that are grazed. In the nineties many measures such as planting of individual trees and of two hedges were financed by the city community and nature conservation trust. At present maintenance is in a bad state due to lack of money. There is no concept of landscape care. Sometimes unemployed people are hired for cutting the trees.

Richerode farm belongs to the Church Institution Hephata. About 20 disabled people are employed directly in the daily farm work with a supervision ratio of 1:7. Furthermore, 60 disabled people work in the garden, household and in vegetable processing. The organic farm works according to the Bioland regulations and is organised in the form of a WfbM (sheltered workshop for disabled people) and cultivates about 90 ha of which 50 ha are arable. Cereals, potatoes and forage crops are grown, 50 bullocks are fattened, 400 laying hens, 60 chickens, 150 ducks, 300 geese and seven sows are kept whose offspring are raised and fattened. A speciality is the potato peeling equipment that allows wholesale marketing and guarantees many jobs.

The landscape of Richerode is characterised by surrounding woodland, a stream and a main road that noisily divides the farm from the landscape. There is a lack of structural elements in the fields that are on average 7ha in size. There is no visible history such as old trees or viewpoints. The animals are kept inside and only some of the poultry is free range. The current farmer is trying to develop identity through landscape work and sees this as a task for the future.

The landscape in all three study farms has changed in general since the start of the activities. The three farmers were interviewed about their attitudes towards landscape, agriculture and work with disabled clients. They rank landscape

issues differently. One of them spent much of his enthusiasm, time, energy and money to realise his ideal: an organised, beautiful and harmonious farmyard. Another farmer sees landscape as something which is a given: the care and maintenance needs support from workers and finance from outside the farm. The third farmer intends to take up landscape work in the future. Although he has lived on his farm for 15 years, his interest in the topic seems to be new and as a result of the unsatisfactory state of the landscape. Because his disabled co-workers are able to operate the farm machinery he makes a particular effort to include measures for landscape development that eases their work and makes it more efficient. As an example he aims to make the fields rectangular. So far there is no concept of landscape design on the farm as a whole, except for individual plans for house-building. The financing from outside enables or at least accelerates these measures. Agricultural production and landscape work compete for area, time and labour. Sufficiently qualified workers are needed for guiding disabled co-workers in landscape work.

Landscape work to design landscape on social farms

From a theoretical point of view landscape work on farms with disabled people can be synergetic. It provides plenty of diverse manual work that can be combined with the daily routine work especially in winter or other times when there is not much agricultural work to do. The strong communities supporting the farms are not so dependent on profit in comparison to the ordinary family farm. Through integration of disabled people the need to produce high yields is lower. Landscape work could be used as an advertisement for the institution and to promote the farm. The philosophy of the community and identification with the location can thus be supported. The disadvantage lies in the additional need for resources that are barely sufficient. But luckily new forms of financing can be found in leasing landscape elements and the work to city people. In the Netherlands we can find some of these financial constructions like the organisation Triple P³ that has the approval of the Ministry of Agriculture to facilitate auctions of small landscape elements to private investors. This project is a huge success. The farmers get financial help to maintain the farm landscape.

Within the SoFar-project landscape seminars were carried out on farms. On Richerode Farm more than 40 people working on the farm, but also interested people from outside the farm took part (figure 3). After introductory statements, basic information from the farmer and the scientists' proposals,

3 See <http://www.groenegoededoelen.nl/>

FIGURE 3: LANDSCAPE SEMINAR INCLUDING PEOPLE WITH DISABILITIES ON RICHERODE FARM



the ideas of all people present were collected and discussed. Key questions at the workshop were: how can the landscape be improved to meet the needs of the disabled people on the farm? how can places for recreation and sensual perception be designed? and how can shelter be provided against the road nearby with its heavy traffic? Also questions on how to improve conditions for wildlife and biodiversity were added. Many clients of the farm were invited to express their needs and wishes by drawing future visions of the landscape and its biotopes in a participatory way (figure 4). The contents and quality of the proposals of course depended on the ability of the different people to concentrate on the questions and ability to express themselves. Anyway it became obvious that the problem of the road with lots of traffic right in front of the farm buildings is at the top of the topics remaining unresolved. But a solution for sheltering the path to the nearby village, by planting shrubs, was a solution at least for a part of this problem that met the expectations of clients. After the seminar the planning process of tangible measures to improve biodiversity on the farm has also continued. Integrating the clients into the process has given them the feeling of being part of the process. They were able to express their needs and wishes to be integrated in further activities.

Outlook

To summarize the multifunctionality perspective of the care farm approach, care farms ‘use’ nature as a tool to ‘heal’ or to employ handicapped people; and they use ‘natural processes’ (like animal-client interactions,

FIGURE 4: PROPOSALS FOR LANDSCAPE DEVELOPMENT BY PARTICIPANTS OF THE SEMINAR (RICHERODE FARM)



natural rhythms in horticulture). Moreover, care farms can also contribute to the care for healthy nature and landscapes: by additional manpower (clients) and less economic pressure (additional income). That makes social farming a 'win-win'-situation, integrating functions like caring for people with disabilities *and* contributing to the development of rural landscapes.

By setting up new programmes such as for children for example and by monitoring the design needs we can help make farms exciting places for special people and also contribute to the sustainability of country life. By connecting design research to programmes which have already started (like the SoFar examples mentioned) we easily can gather data. This could be a new task for the Farming for Health community-of-practice.

Landscape care needs many helping hands. Social farming allows the use of hedgerows for dietary fodder, and it allows extensive care for biotopes and provides experiences for children on school farms (van Elsen and Kalisch 2007). Green Care in agriculture or 'social farming' might lead to new perspectives for healthy agriculture, healthy people and healthy landscapes in Europe.

References

- Elings, M. and J. Hassink (2006) Farming for Health in the Netherlands. Pp. 1-13 in J. Hassink and M. van Dijk eds. Farming for Health. Green-Care Farming across Europe and the United States of America. Wageningen UR/ Frontis Series Vol. 13. (Dordrecht: Springer)
- Cooper Marcus, C. (2001) Hospital Oasis. *Landscape Architecture* 19 (10) pp. 36-99
- Cooper Marcus, C. and M. Barnes eds. (1999) Healing gardens. Therapeutic benefits and design recommendations (New York: John Wiley & sons, Inc)
- Friede, U. and T. van Elsen (2007) Das historische Konzept der Ornamented Farm als Vorbild für Landschaftsgestaltung durch den Ökologischen Landbau? – Beitr. 9. pp. 899-902 *Wiss.-Tagung Ökol. Landbau* (Stuttgart-Hohenheim)
- Hassink, J. and M. van Dijk eds. (2006) Farming for Health. Green-Care Farming across Europe and the United States of America. Wageningen UR Frontis Series Vol. 13. (Dordrecht: Springer)
- Kalisch, M. and T. van Elsen (2008) Kulturlandschaftsgestaltung in landwirtschaftlichen Betrieben mit Integration von behinderten Menschen – Fallbeispiele in Deutschland. – In press.
- Keser, O. and T. van Elsen (1997) Soziale Landwirtschaft - landwirtschaftliche Sozialarbeit. – *Lebendige Erde* 3. pp. 231-235, Darmstadt.
- Köppl, K. and T. van Elsen (2005) Kulturlandschaft durch Ökologischen Landbau im Saint-Amarin-Tal (Südvogesen). Pp. 164-178 in T. van Elsen ed. Einzelbetriebliche Naturschutzberatung – ein Erfolgsrezept für mehr Naturschutz in der Landwirtschaft. (Witzenhausen: FiBL Deutschland e.v.)
- Pruns, H. (1994) Die Idee der Ornamented-Farm. Ornamented-Farmen in der deutschen Kulturlandschaft. Pp. 99-192 in H. Heckmann ed. *Kunstlandschaft, Landeskultur, Bewahrung der Umwelt*. (Weimar, Köln, Wien)
- Ulrich, R. (1999) Effects of gardens on health outcomes: theory and research. Pp. 27-87 in C. Cooper Marcus and M. Barnes ed. *Healing gardens. Therapeutic benefits and design recommendations* (New York: John Wiley & Sons)

van Elsen, T. and M. Kalisch (2007) The diversity of care farms and their multifunctionality – contributions and perspectives for nature and landscape development. Pp. 67-82 in C. Gallis ed. Proceedings of the COST conference 'Green Care: Health effects, economics and policies', 20-22 June 2007 Vienna (Thessaloniki: University Studio Press)

van Elsen, T., Röhrig, P., Kulesa, V., Schreck and C. Heß (2003) Praxisansätze und Naturschutzpotenziale auf Höfen des Ökologischen Landbaus zur Entwicklung von Kulturlandschaft (Bonn: Angewandte Landschaftsökologie 60, Bonn)

Thomas van Elsen
FiBL Deutschland e.V.
(Research Institute of Organic Agriculture)
Nordbahnhofstr. 1a
D-37213 Witzenhausen
Germany

Yvon D. Schuler
ORGYD procesadvies
Wagnerlaan 67
NL-6815 AD Arnhem
The Netherlands