

Coaching the process of designing a farm: using the healthy human as a metaphor for farm health

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Abstract

This paper is on coaching farmers in (re)designing a farm. It describes how farmers can become inspired to design a sustainable farm by the way medical doctors look at the human being and his health. Sustainability in farm management is usually strived for in such a way that damage to People, Planet or Profit is prevented. However, preventing such damage does not automatically mean that humans, animals, rural societies, landscape, and nature can develop and manifest themselves to the full extent. Only in examples where the emphasis is on positive characteristics of and actions in farming, and where the approach is based on coherence between the three layers described (agricultural production, agri-culture, and the meaning of life and existence), we observe that all stakeholders can fully express themselves. This approach is comparable with the positive way in which the World Health Organization describes human health, distinguishing three different layers of health: physical health, socio-cultural health, and mental health. Applying the metaphor of the healthy human enables us to ask relevant questions as to how to achieve farm health. The power of the metaphor of the living human lies in the possibility to introduce the concepts of *life*, the *conscious direction*, *transformation* and *health* in the process of (re)designing the farm organism. The living farm emerges under the direction of the farmer as a new entity in which the possibilities of the site, the societal and agro-ecological context and the people involved are all mutually fine-tuned. Only if all three interconnected layers of health (i.e., the physical, socio-cultural, and mental health) are equally addressed, true farm health, and, in our definition of farm health, also sustainability can be achieved. This paper does not address the issue of creating an absolutely healthy and sustainable farm but is about farm transformation and the art of development, step-by-step reshaping specific farm elements, thus allowing the entire farm to become healthier.

Additional keywords: coherence, farm identity, farm individuality, farm management, farm organism, sustainability

Introduction

Sustainability for enterprises is societally important and topical. This also applies to agri-businesses and farms. Sustainable entrepreneurship is usually translated into negative terms, i.e., refraining from imposing damage on People, Planet, and Profit. Checklists, rules, and regulations are commonly used to support enterprises in avoiding risks and (over-)exploitation as well as circumstances allow (e.g. Boone & Ten Pierick, 2005). Nevertheless, there are numerous situations in agriculture in which people, animals, rural communities, landscapes, and nature are impeded in their development. We call this an unsustainable or an unhealthy condition. Jumping from one incident to the next regulation is typical for the intensive present-day agriculture in Europe. Nowadays, crises can only be solved if 'sustainability' and 'farm health' are translated into positive and action-oriented terms.

Similar to these trends regarding farm health, one can also observe trends in human health care towards a broader and more positive meaning of being healthy than merely being free from physical diseases. The World Health Organization (WHO) describes human health in positive terms, as a state of complete physical, mental, and social well being (Anon., 2006). This definition discriminates between three (interconnected) layers of the state of the human being: the physical, social-cultural, and mental layer. The well being of a human being is assessed on the basis of these three layers.

It is common to speak and think about enterprises as being living entities with their own identity. Enterprises 'grow', 'develop', 'manifest themselves', 'flourish', etc. (e.g. De Geus, 2005; Zwart & Middel, 2005). These words suggest a terminology very similar to the one used for human beings. This certainly applies to enterprises in the agricultural sector, i.e., farms. The similarity in the development of our thinking about human health and farm health triggered us to use the human being as a metaphor for a farm and human health as a metaphor for farm health. In the practice of coaching farmers who are (re)designing their farms, this metaphor proved to be functional.

In a healthy human all specialized organs function within the organization of the entire living human as it interacts with its environment. Starting point in our work towards a healthy farm is the farmer who takes his or her responsibility for all internal and external relations of the farm. This paper is about farm transformation and the art of development. It describes the step-by-step reshaping of specific farm elements, thus allowing the entire farm to become healthier. The paper also describes how farmers (or entrepreneurs in agriculture) can become inspired by the way in which physicians (especially those who work with the three layers in the human being) approach the human being and his relations with the outside world and his health. The three corresponding layers in an agricultural enterprise comprise agriculture for production (physical layer), agriculture as culture ('agri-culture'; cf. Pretty, 2002; social layer), and agriculture as part of fulfilling a meaning in life or existence (the mental-spiritual layer).

Some comments on working with a metaphor and on the 'healthy human'

A metaphor is a direct comparison between subjects that are unrelated and can be used as a forceful and assertive type of trope. We use the metaphor of the human health as a powerful tool providing vital images to analyse the reality of farm health in its full complexity, i.e., as a *diagnostic* tool and a source of *inspiration*.

The metaphor, however, is not meant as a model in the sense of a helpful simplification of reality. We do not explicate whether or not a farm – in form and function – is a real existing spiritual entity (like a human being is). People with a mechanistic–material world view and people with a spiritual–holistic world view can both use the concept of the farm as a living organism, either by using it as a metaphor or as a reality.

Essential in our approach is that it is not a random living organism but the human being that will serve as a metaphor: man is the only living being capable to create his own environment in which he can function optimally. This not only allows him to be efficient, direct, and self-conscious, but also to fulfil his own potential as the ultimate reason for his existence. These qualities are also essential in the case of running a farm.

Not every farm is a living whole by itself. The farm as a whole organism is a combined result of the local, natural conditions, the history, the manager, and the co-workers in a social and natural environment. The manager with his/her personal ambitions is both part of the farm and is able to overview the whole farm and its (internal and external) relations. The farmer as a director can fine-tune the different units in such a way that a living whole emerges.

The health of a farm will be elaborated in terms similar to the terminology used for the three layers of human health indicated by the WHO and is therefore a wider concept than the more commonly used economic remunerativeness. Being financially or economically remunerative is only one aspect of being healthy. This wider concept of farm health has many parallels with sustainability in the broad sense of the meaning of the word. Therefore, we consider a healthy farm equal to a sustainable farm. This not only reflects the broad interpretation of both farm health and farm sustainability, but also expresses that we consider the social and mental layers of farm health as equally important. Moreover, farm health provides sustainability with a physical, socio-cultural and metaphysical meaning.

The three layers of health

Healthy people can tolerate certain diseases and even can become healthier and wiser after recovery than before. Being healthy does not necessarily mean never being ill. Healthy people are able to handle crises and deal with sidetracks and can re-find their road. Healthy people are capable of responding properly to changes in the outer world. Healthy people can enhance the skills and talents they wish to develop and can realize their potential in the areas in which they choose to develop. Healthy people are capable of fine-tuning their composition, life processes and motives. Healthy people are well

and functional in physical terms, but also in social and mental terms as defined by the WHO. Healthy people are capable of managing the creative tension between harvesting the past and dreaming the future, between renewing and consolidation.

There are three layers of health; all should be acknowledged and should be made in tune with each other: physical health, socio-cultural health, and mental health.

Physical health

When examining a human being in pain, the physician first analyses whether the body is complete and functions properly. On a farm, the profitable, streamlined, economical and ecological processes of the farm are at stake. Therefore, a first examination will focus on the discriminant figures of the financial results, the efficiency of the production processes, the flexibility of the response to market changes, the efficiency of the nutrient cycles, and the crop yields. Is animal welfare adequate, are the rules of the labour laws properly applied and is there any intolerable and avoidable pollution of the environment? If the assessment is positive then the farm may be considered physically healthy and safe.

Socio-cultural health

When people show signs of burn-out, the physician will ask about their social functioning and, for example, their life style and rhythms therein. At the farm, the culture determines the social processes. Questions are asked relating to the interactions between different co-workers, whether the business culture is stimulating, whether the rhythms during working hours are such that recharging is possible and whether the interactions between the inner and the outer world are easy-going. Are the comments on the disappointing layer of quality discussed in a constructive way with the supplier? If the answers are yes then the farm is socio-culturally healthy.

Mental health

When people complain that they cannot manifest themselves in a way they deem proper then the physician with a holistic approach will ask questions what it is that inspires them and lets them re-connect with their inner self and living environment. In the case of the farm, it is the self-learning aspect that is relevant. What are the sources of inspiration, does the farm provide opportunities for continuous development within the human beings involved, is there a mission, and is the work relevant to the outside world? Is there a clear identity and is this shown? Is this identity also true, sincere and genuine, and not merely based on hollow phrases from an image consultant? Are the staff and the enterprise as a whole learning from what is being produced? Is there autonomy in thinking and behaviour? If these questions can be answered positively then the farm is mentally healthy.

We can only call a human or a farm healthy if there is consistency in and cohesion between these three layers of health. Such a farm is autonomous, goes its own way, is less dependent on hype and subsidies, and is connected to the real urges and possibilities from the surroundings. The farmers are able to continue with their work for a long time because they follow their own motives, thus creating a dynamic sustainability

of their activities which goes beyond good stewardship. In our view, this interpretation of health is therefore the ultimate sustainability.

Consecutive steps in working with the metaphor

The concept of a healthy farm is operationalized in Box 1. The method how farmers can learn from physicians to approach farm health is described on the basis of the practical experience of the first author in coaching farmers. The farmers and the coach together explore the course of life of the farm, learning from the past and translating images of the future into a current farm identity. The day-to-day issues, such as reducing stress, making work more rewarding and pleasant, profit and efficiency, are placed in this context and this leads to ideas for an organizational and spatial redesign of the farm. A physician alternately observes the diseased part and the whole being of an ill person. Similarly, the distinct units and processes of the farm are observed separately but also their function within the entire farm is scrutinized.

Aspects of the human are analysed in four steps and the terminology for the human being is translated into the terminology of the farm based on functional meaning. In Table 1 this is done for the morphology or spatial composition (Step 1), the life processes (Step 2) and the identity (Step 3). The exploration of the consistency of health in the three layers is done as an extra check (Step 4) on the results of Steps 1 to 3. This Step 4 is not shown in the table but its result is explained in the text. The four steps provide insight into the extent to which the farm resembles a living and healthy entity, with coherent functioning of all units and with an identity.

By going through these four steps, the farmer gets abundant ideas of how to improve the health of the living farm organism. During the coaching, farmers express their worries and discord, their feelings of lacking crucial elements, their perceived risks, aversions, and struggles. The coach helps translating these elements into new questions for fine-tuning.

Usually, the process starts with a mapping exercise of the entire farm, describing the composition of the farm system (Step 1). This includes pronouncing the borders of the farm and making them conscious and visible (comparable to man's skin) and the different units of the farm and their functions (comparable to man's organs). It is important to indicate how these organs are interrelated (in time and space) and even how they are connected. Yet, mapping the organs does not need to be extensive as the level of detail depends on the specific objectives of the exercise, i.e., identifying where possible malfunction and new possibilities occur. It should be stressed that the farmer and his co-workers also form an organ of the entire farm, defined by their ambitions, skills and limitations. This first step includes assessing – based on the metaphor – whether all functions needed are present and whether all functions are mutually fine-tuned.

Step 2 of the process deals with the processes enabling the entity to be alive. Also in this phase the choice how to classify life processes depends on the objective of the exercise. In the example of this article we identify the following life processes: perception of the environment, metabolism (including cycles of matter such as nutrient cycles),

Box 1. Three contrasting examples of operationalizing the concept of a healthy farm

Many actual problems on farms can be solved in a sustainable way by applying the concept of the healthy farm organism. The methodology of the approach is given in the main text and illustrated in Table 1. To operationalize the concept, we provide three examples of experiences brought in by farmer-participants of the coaching trajectories.

On Farm 1, in a bad financial situation, the farmer thought it was a good idea to start a small campsite. The campsite was a new and separate unit on the farm, and not much thought had been given to the question of how well this new unit would fit in the entire farm. This impulsive activity appeared to be undesirably laborious and caused many new problems. Moreover, the additional effort needed did not suit the farmer, who actually preferred to work quietly in close alliance with nature. Applying the metaphor of the human being, this means a new organ at the physical layer without proper tuning to the other layers. This always results in discord. The solution for this separate farm unit is to either close down the campsite or to bring it in tune with the rest of the farm, for instance by stimulating campers to participate in farm activities.

On Farm 2 there was a desire to pay more attention to landscaping. The intentions were to restore the beauty of the old agrarian landscape. An old-fashioned and romantic home garden was added to the modern farm buildings and premises. Even though the home garden was beautiful in itself, passers-by experienced it as non-authentic. Some even considered the home garden awkward and kitschy. Applying the metaphor of the human being, this represents the presence of different identities at the distinct layers that do not match. The solution is to integrate the landscaping effort into the concept of the entire farm in order to underline its identity. Within one region, it is then possible to create very different 'farmscapes' (i.e., farms embedded in a specific environment), attributing to a diverse and interesting, and yet modern landscape.

On Farm 3 the farmers' couple running the farm was initially not satisfied with the origin and quality of the seed they used. Out of necessity they started their own seed production, which they started to enjoy. Seed production even became a specialty of the farm. Similarly, because they were not pleased with the quality of manure they obtained, they started to rear and breed their own animals and again they enjoyed it and became good at it. In this way, the couple developed a coherent farm and all elements were very well thought over. The different units of the farm are all interrelated, they suit the managers and each of these units gives added value to the whole. The identity is clearly marked in various ways and this attracts capable co-workers and suitable customers, who all know what to expect. The farm identity also provides a degree of clarity making management decisions obvious (Waterhouse, 1999). Management is therefore not a heavy burden.

These examples from the coaching practice illustrate that applying the metaphor of the human health makes it possible to discuss essential elements of farm health and underlines the importance of good coherence between units and between layers. The role of each unit within the whole and in the different hierarchies of wholes is proven to be essential. Finally, the examples also stress the need for a clear notion of identity.

growth, transformation, reproduction, self-regulation (resilience). These life processes enable the organisms to engage in all kinds of relations with the outer world to realize its own objectives, and to fulfil its meaning (see also below). The analysis provides an assessment to what extent these life processes are all present, function well and are fine-tuned, both mutually and with the influences from outside. However, not all circulation of matter needs to take place at the farm itself. Imports of seeds or propagules (if properly produced) or exports of waste and waste water for efficient recycling elsewhere are options.

In Step 3 the identity of the farm as an organism is questioned. What is its uniqueness? What are its strengths? What are the relevant values? What is the meaning of the entire enterprise? The analysis includes an assessment of internal consistency and of the possibilities to realize the full potential. This analysis will determine whether the farm identity will satisfy the farmer or not (yet).

In Step 4 the health of the whole living organism is analysed, based on the three layers also distinguished by the WHO, i.e., the physical, social-cultural and mental health. In this step, all layers of composition and life processes are re-analysed to check whether the health of the farm has really been considered based on all these three layers. Most extensionists usually emphasize the physical and social aspect. In this analysis it is assessed whether the farm is healthy in all three layers and whether the three layers are mutually consistent.

Applying the metaphor

In Table 1 we show how the metaphor of the healthy human organism can become instrumental in realizing a natural course of development, defining the identity farmers give to the farm. The metaphor is applied by underlining the similarity between the human organism and the farm organism, considering composition, life processes and identity. The table also illustrates how, by going through the first three steps, the composition, life processes and identity can be analysed. Finally, in the last column, the table presents examples of how farmers improved the health of their farm as regards the issue listed in that row. It should be stressed that Table 1 contains examples; it is not a complete blueprint. The examples are indicated in the order of the three layers of health.

Below, we elaborate several issues and concepts in more detail.

Some comments on ‘fine-tuning’ and ‘coherence’

In Table 1 the concept ‘fine-tuning’ is often used. This concept is illustrated in Figure 1. Fine-tuning can be done in two directions. For example, the choice for growing certain crops can be based on quality of the available soil. However, within certain limits it is also possible to improve the soil in such a way that it will become suitable for growing the crops that have been selected as most desirable. It is essential that one is aware of both options when making decisions. It is a question of aims or means, or of objectives and tools. During discussions on farm strategy, it often appears that objectives

Table 1. Similarity between the human organism and the farm organism, considering composition, life processes and identity. The table also provides examples of how the health of a farm can be evaluated and improved. For further explanation see text.

Human aspects	Function	Farm aspects	Analyses and assessment of health system	Examples of improvement
<i>Step 1. Composition</i>				
Skin	To contain the whole	Parcel borders	Is the border everywhere obvious to owner, co-workers, visitors? Do remote lots get attention?	Agreements with neighbour Placing marker trees or fences Pictures of remote lots in canteen
	Semi-permeability; partly closing, partly letting pass	Closed and open borders	Is the extent of being open or closed everywhere suitable given different influences of wind, water, visitors, drift, view, etc.	Plant hedgerow, border with flowers or place wall Opening a hedgerow or sight line Sign with opening hours
	To show identity, business card	Outside	Does the outside show the farm identity?	Outer hedgerow well taken care of View on what happens on the land Informative sign at entrance
Heart	Encounter with outside world, overcoming contradictions	Meeting point, farmyard, canteen, staff meetings	Is there a meeting point? Is it pleasant to be there?	Well-maintained farmyard without too many cars Central picnic table
Various organs	Specialized parts serving the whole	Various breakdowns into farm units possible	Are all functions required for an entire farm present? Are there any separate units with little significance for the whole? Is farm management tuned to the history, soil, microclimate, co-workers and ambitions? (See inner arrows in Figure 1) Are the farm cycles mutually adjusted?	Introducing missing functions Give more functions to loose units or abandon them Start farm unit that is challenging or fascinating Abandon crops that do not perform well on this soil Use contacts of father If desirable: own feed, manure, propagules, breeds, bedding Own wind mill for cold store
Connection between organs	Pre-requisite for internal communication and transport between parts	Paths, service-pipes, hedgerows, ditches, attention, talks	Are all parts linked, no parts ignored? Are all connections well maintained? Are people collaborating pleasantly?	Clean ditches, pave paths, syringe drain tubes Efficient and fluent infrastructure Path and goal to remote corners Joint breaks at fixed times

Step 2. Life processes

Observing outside world and tuning into it	Meaning for higher 'whole'	Adjusting management to outside world Meaning of farm for region, society, etc.	(See outer arrows in Figure 1) Is management tuned to consumer market? Is management tuned to labour and knowledge supply in the region? Is management tuned to regional supply of resources? Is management tuned to nature and landscape? Does the farm offer a social and cultural added value to the region? Are contacts pleasant?	Greenhouse heated with cooling water from neighbouring enterprise Labour-yard for green-care clients from nearby institution Harvest festival for entire village Haymaking in nearby nature conservation area Working weeks for schools Compost of clippings from wild vegetation as green manure Vegetables for nearby restaurants Extend ecological conducts across farm
Metabolism, incl. respiration	Uptake, transformation and excretion of matter	Resources are converted into products and waste	Is the production economically efficient? Is the production ecologically efficient? No harmful waste products? Are resource supply and waste management in the hands of reliable partners?	Reconstruct activities with little added value Improve cultural practices to increase productivity Use grading to improve product quality Apply litter from nearby nature areas in pen barn Create halophyte filter for waste water Fattening calves on farm if other farm is not available Coupling farms for exchange of feed and manure Contract specialized contractor
Growth and development, biography	Birth, growth, education, change and death	Farm biography connects start, build-up, finish, succession and end	Is there a thread that runs through past developments into the present and future? Is there tolerance and openness to learn from experience? Is there room for experimenting next to the core business? Are growth and investments occurring at a quiet pace? Does management suit the phase in the farm biography?	Tell the farm biography to include dreams about the future Display old tools Participate in study groups Reflect on farm administration Give new crops a try Increase organic matter in the soil

Table 1. (Cont'd)

Human aspects	Function	Farm aspects	Analyses and assessment of health system	Examples of improvement
Reproduction	From the existing organism, new organisms arise	Start second enterprise or pass on the knowledge	Are experiences with farming passed on to new farmers?	Demonstration farm Time for trainees Outsource compost making
Self-regulation, immune system	Maintenance, repair, feedback	Resilience of farm	Is there time to re-charge after busy period? Does the farm survive a crisis in collaboration? Are there alternatives when the consumer market of an important product collapses? Is the change in market a threat or an opportunity? Has each farm unit multiple functions and can each function be carried out by several units? Is there feedback between farm units?	Working rhythm, with Sundays off Use of interim-management during holidays Co-worker can replace manager when ill Diversity in products Diversity in market relations Tree stands as an investment for lean years Variety mixtures for dry or wet seasons Generator in case of power failure Use chickens in a multi-functional way: to produce eggs and meat, to control harmful leatherjackets and to contribute to liveliness
<i>Step 3. Identity</i>				
Identity, individuality, autonomy	Director, uniqueness, essence of the organism, current values	Farm identity, tuning the site, society, history, people and farm manager in an autonomous way	Are all aspects of spatial composition, life processes and manager's intentions forming a consistent whole? Are people aware of the uniqueness of the farm? Do the current values provide direction for the future? Does the farm reflect the special choices that are being made?	Co-workers practise in telling each other what the aims are of the farm: healthy products, pleasure in work, personal transformation, working place for challenged people The sign at the gate and the website provide information but also reflect the atmosphere

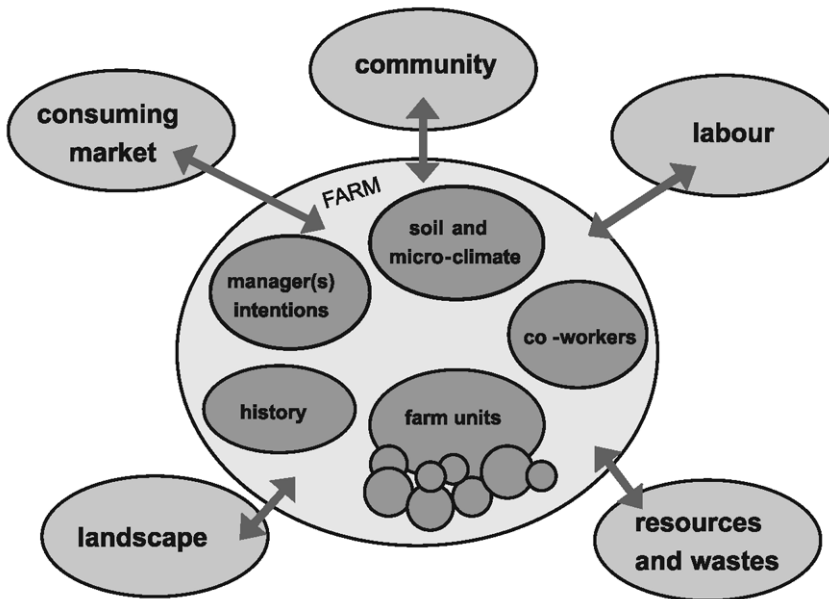


Figure 1. Internal and external connections of a farm. The relationships shown can be analysed individually to assess whether the cohesion and mutual tuning is optimal.

and tools are not clearly distinguished. An example may be the fact that a certain farm is producing bread wheat with a gluten content that is below what is desired. Before solutions can be found for this problem it is crucial first to consider whether growing wheat is the objective or the tool as this determines the point of view. If it is considered a major objective to produce bread from farm-produced wheat, then indeed bread wheat is an objective. Growing wheat can also be a way to create a healthy crop rotation. In the latter case wheat can be replaced by another crop that gives a similarly healthy crop rotation. In the first case, changes in crop husbandry or in the technology of baking are needed to obtain high-quality bread.

The science of the human body provides some general examples of the functioning of organs and their meaning for the entire organism. Applying the metaphor enables us to translate the 'coherence' in humans into coherence in farms: organs or farm units are coherent when the following two conditions are met:

1. The units are mutually tuned in form and function. See the inner fields in Figure 1. For a farm this tuning can be recognized in farmers' experiences and observations. For instance: the crop grows well on the soil; the hedgerow fits as it functions well as a wind break; the farm buildings are all built in a similar style; skills and talents of co-workers are well exploited; there is synchrony and consistency between personal values of the manager, farm strategy and activities.
2. The units offer an added value that is functional for the entire entity. See the outer arrows in Figure 1. Examples are: more or less closed nutrient cycles; even distribution of labour needs; continuous availability of new propagules; complementary talents

and skills of co-workers; functional ecological diversity. This added value can be realized from different angles such as healthy products, pleasant labour, and personal development. Without a clear farm objective the added value is difficult to judge. Figure 2 gives an example of a farm that reached a high extent of inner coherence. The available land, the type of soil, the crop production, the number of animals, and the specialties of the farmers are mutually tuned to the farmers' ideal of becoming more or less independent of the uncertain quality of imports.

When aiming at coherence, it is important to realize that coherence is based on a complex network of interactions, both internal and external ones. Adding a shop as a unit to the farm because there are many bikers passing by might be an example of an innovation that fits with the environment (i.e., fits with the external relations). But it may not fit with the entire farm, resulting in the malfunctioning of other units, and so it does not fit with the internal relations.

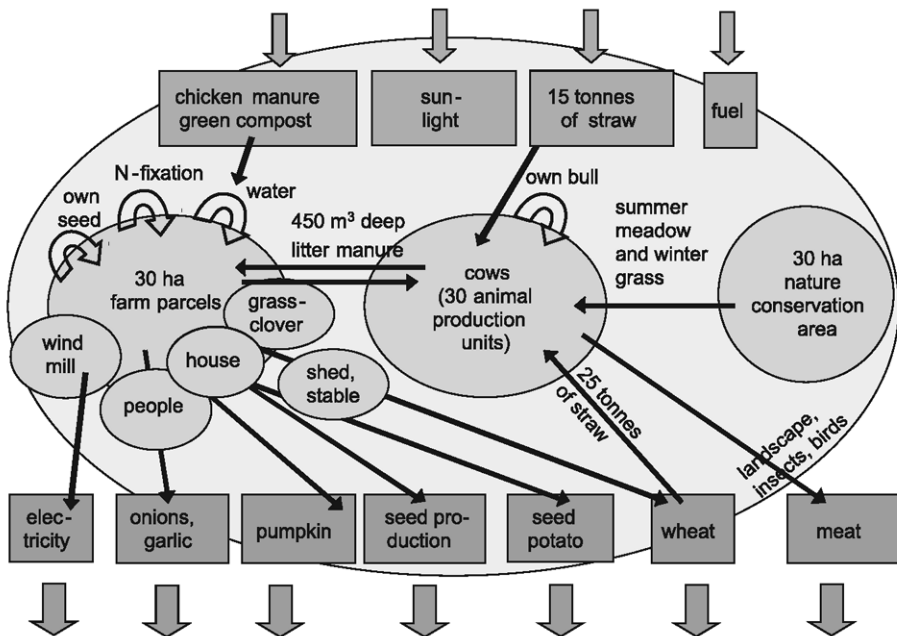


Figure 2. An example of the relations at the physical layer of the Gaos Farm in Biddinghuizen, The Netherlands. Farm organs are presented by ovals, and their internal and external functional relationships by arrows. Rectangles at the top of the figure represent inputs, and rectangles at the bottom represent outputs. This farm aims at closing the cycles to the maximum extent, thus controlling quality. At this point and time only small quantities of external inputs in the form of straw, fuel, and manure are needed beside the incoming radiation as the primary energy source of all agricultural production. The remaining inputs required are produced on the farm itself, as indicated in the central part of the figure.

Some comments on ‘meaning’

We can also apply the metaphor in a different way, more focussed on meaning of existence. Until now, we have considered the human being as the whole and the organs as the units. However, the human being is also one of the possible entities in the hierarchical sequence cell, tissue, organ, human being, village community, etc. This sequence is relevant, as the reason of existence of a unit can never be found in that unit itself, but should be found in the next higher hierarchical level. This also applies to the farm. The meaning or the reason for existence of a single farm can only be found in the context of the regional society around the farm (see outer fields in Figure 1). This makes strengthening the cohesion between farm and environment so essential. Important elements in that environment are:

- Consuming markets for food products, but also the consuming markets for marketable experience. This element is essential as it is the source of income.
- Landscape, ecological connections. These elements are meaningful for nature and landscape.
- Community. The social and cultural added value of the farm for the people in the region.
- Labour and knowledge supply in the region, creating the social conditions for production.
- Supply of resources and waste management, creating the natural conditions for production, but also determining the pressure on the environment.

The meaning of a sustainable farm is much wider than the profit for the individual farmer and his family. The meaning also includes pleasure from labour, work-related development, experience of landscape, rural society, food production, waste management, elements that may be difficult to express in terms of financial value. However, the meaning is determined by the farmer and the diversity in farmers causes diversity in farms, and thus creates a diverse rural landscape.

Some comments on ‘identity’

The human being has an urge to develop his potential, to manifest himself in society. In the same way, also a farm manager will strive to develop the potential of the farm and to express its own farm identity. The concept of identity has an internal aspect (the reason to exist, ‘raison d’être’) and an external aspect (image). Fashion can to some extent change the style in which the (external) image is expressed. But the internal ‘raison d’être’ does not change; it only becomes clearer and more explicit over time.

Unveiling the inner farm identity is not easy. Zwart & Middel (2005) describe the narrative method to unveil the essence in a biography. We work in this tradition. Farmers tell about the emotional highlights and depths in their farm biography. The coach or colleagues listen(s) to discover the drama behind the facts. Looking backwards at the moments of existential choices, the inner motives of the farm identity at the third layer become increasingly clear. The whole puzzle of internal and external connections and the attitude to feel responsible for all farm relations give the opportunity to express the farm identity at the first and second layer. Farmers report that a powerful

and conscious farm identity is a great help in making management choices and a guarantee that entrepreneurship remains challenging and fascinating.

Discussion

Organic agriculture is based on four principles: ecology, care, justice and health (Anon., 2005). The fourth one, the Principle of Health, is developed in the production system and production chain: a healthy soil – healthy crops – healthy animals – healthy people – healthy earth (Luttikholt, 2007). In this chain there should also be a position for healthy farms, i.e., the healthy farm as a healthy organization and the place where working or staying is healing. Until now the concept of the healthy farm is not applied so consciously in organic agriculture as we think it should be.

Living humans have been used more often as a metaphor for an enterprise or a farm. Both in the modern views on management of large enterprises (e.g. Lievegoed, 1993; De Geus, 2005; Zwart & Middel, 2005) and in the literature on biodynamic agriculture (e.g. Klett, 1995), this metaphor has been applied. However the different concepts are not always used in the same way. The success factors identified by these authors are similar to the characteristics we described for healthy farms.

Some authors have described the concept of farm organism in order to stress the cohesion between the different parts (e.g. Raupp, 2000). As mentioned in the introduction, we do not use a random living being as a metaphor for the healthy farm but selected purposely the human being, as the human being can take the lead in his life in a conscious way. Unfortunately, the human being does not always use this capability. Similarly, a conscious direction is not present for every farm. But a conscious direction is essential according to the metaphor of the healthy living human being as a powerful management instrument. To stress this conscious direction and its uniqueness, the term farm individuality is used. Some farmers experience the farm individuality as a spiritual being, guarding the farm organism, in the same way as some men experience that their individuality is guarded by some spiritual entity. To stress this metaphysical aspect, the term organizational wholeness is often used, even while making explicit use of the metaphor of the living human being (Waterhouse, 1999).

The term 'agro-ecosystem' is most often used to underline the ecological relations within a farm. Thompson (1997) includes the farmer and uses the term for what we call here 'farm organism'. In addition, in his thinking about farm sustainability, he introduces two different concepts: (1) resource sufficiency, i.e., being responsible for future generations in handling scarce resources, and (2) functional integrity, i.e., keeping the ability of regeneration of agro-ecosystems for future generations. These two concepts correspond to our first and second layer of farm health, respectively, as described above. It is remarkable that in many discussions on sustainability the third layer is absent. There is little focus on the position of managers/farmers as humans, on their way to fulfil their ambitions. The actual stress in labour and the search for meaning by farmers show that it is urgent to include this third layer 'mental health' to give farmers a future.

In literature the concepts of farm identity, farming style and farm characteristic overlap. These concepts have in common that in all cases they consider the coherent

characteristics of a system through which the system distinguishes itself from other systems. Sometimes the self-learning capacity of the system is an issue (Van Der Ploeg, 1999; 2000) without using the metaphor of the living human being. For example, the description of a farm as a rather loose collection of ad hoc activities can be an accurate farm characterization, even a farm identity, but in our view most definitely not a characteristic of a healthy, future-oriented identity. The former characterizations lack the well-considered coherence and the man-driven impulse to give direction to the future.

In the description of the healing process of a woman who suffered physical and mental abuse, De Vries (1998) showed us an interesting phenomenon. At the start of the healing process the woman was totally determined by her past, the surroundings and her survival strategy. She lived like a 'puppet'. At the end of the healing process she emerged as an autonomous person. The violence and suffering still were an intrinsic part of her life, but now she had the lead. By practising consciousness and will between who she was and who she could be, she developed an 'inner-self'. We observed similar processes taking place while coaching towards an autonomous farmer, finding his or her way between outer possibilities and inner motives. It is an example of the third layer of a farm's or a farmer's mental health.

The concept of naturalness as elaborated by Verhoog *et al.* (2003) for agriculture in general, by Verhoog (2005) for animal husbandry and by Lammerts Van Bueren *et al.* (2003) for crop husbandry and re-defined elsewhere in this special issue (Verhoog *et al.*, 2007), uses three approaches to naturalness in organic farming. To some extent these approaches can be linked to the three layers in our health concept: the non-chemical approach assists in creating physical health, the agro-ecological approach has its basis in the socio-cultural approach (because agri-culture is a reflection of our culture and civilization) and the integrity approach is based on the mental health, but also on the consistency between all three layers. Essential in both ways of thinking is that all aspects and layers must be taken into account before a strategy or approach can be called 'natural' or 'healthy'.

In today's multifunctional agriculture, relations of the farm with the outer world are investigated to identify options for additional value of the farm for society (also resulting in additional income). Options may include green care farms, landscape management, education, tourism, and a closer relationship with the consumer. There are even social experiments in which novel rural institutions are tested that intensify the connections between the farm and its societal environment. A clear and well thought-out concept of a novel institution is the 'Buurderij', a Dutch pun playing upon the words 'boerderij' (i.e., farm) and 'buurt' (i.e., neighbourhood) and translated here into 'neighbourhood farm' (Wagemans, 2004).

Concluding remarks

The diagnostic interviews that holistic physicians have with their patients on their health inspired us to find tools to discuss perspectives enhancing the sustainability of farms and the development of the countryside. We used the metaphors of the

human organism and its health for the farm and its health as an analytical, diagnostic and didactic instrument. The power of the metaphor of the human being lies in the introduction of the notions of life, conscious direction and health. The 'living' farm emerges under the direction of the farm manager as a new entity with its own identity, based on the respectful integration of the opportunities offered by the location, the societal context, the landscape setting, the people involved and the ambitions of the farm manager. The assessment whether a farm is healthy or not is a necessity to ensure real sustainability and certainly is not merely an addition based on moral pressure or a strive towards an attractive outer image.

Using the metaphor of the healthy human being makes it easy to trigger highly relevant questions on healthy farm management aiming at strengthening identity and sustainability. Only if all three layers of health are involved, i.e., the physical, the socio-cultural and the mental health, it is possible to obtain true farm health. In current sustainable farming especially the layer of mental health is often neglected. The metaphor of the human being brings this layer in. So the 'triple-P-approach' (people, planet, profit) should also be examined as a 'triple-layer approach'. A healthy farm has an added value for the development of all stakeholders in its environment. The unveiled identity helps the manager in making proper decisions. People love to work on such a farm and the farm contributes to an exciting landscape.

A moment of change on the farm asks for a reconsideration of the entire new whole, a new coherence and a new identity in order to avoid becoming victim of dispersion with a farm consisting of loose activities and *ad hoc* adjustments to the prevailing subsidy policies. A farm should fit in the environment, the landscape, the society and should suit the springs of the actions of the entrepreneurs involved. The current crisis in agriculture has, in our view, a lot to do with the loss of traditional coherence and the lack of a new type of coherence.

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