

The importance of peasant agriculture: a neglected truth

Farewell Address of Jan Douwe van der Ploeg

New divides are emerging within the many and highly diverse agricultural systems that exist around the world. These pose considerable threats for food sovereignty and security, the livelihoods of hundreds of millions of people and for the urgent need to mitigate against climate change. The directly visible expressions of these new divides are everywhere. In much of the Global South they are visible in the contradictions that exist between a small segment of farms engaged in production for export and the large majority of peasant producers mostly producing for domestic markets. Scarce resources (land, water, access to markets and services, policy support, etc.) are increasingly being taken away from peasant agriculture and utilised in the agro-export pole of the economy. This comes with massive, and sometimes shocking, increases in poverty, unemployment and despair. A similar divide came to the fore in Italy when COBAS, the committees of agricultural entrepreneurs, came into direct conflict with the majority of dairy producers over the distribution of milk quotas. The same conflicts can be seen in the Netherlands, where a minority of large-scale dairy farmers has provoked a huge agro-environmental and socio-political problem for which, according to the main farmers' union (LTO), the ministry responsible for agriculture, agro-industry and the banks - the tab should be picked up by the majority of Dutch farmers. This provoked frictions and tensions the like of which had not been seen before. Only a parliamentary vote avoided the implementation of this ludicrous proposal.

These three examples share one important factor in common. They all illustrate the divisions and conflicts that are *internal* to the family farming sector.

Until recently the main threats to peasant agriculture originated from agri-business, banks, policies with a strong urban bias and/or corporate agriculture. These threats came, schematically speaking, from the outside. The new divides are decisively different. They come, as it were, from the inside. This is due to the fact that the family farm sector has been developing, over the last decades, along two divergent pathways. One is peasant agriculture, the other is entrepreneurial agriculture. There is no black-and-white difference here. However, there are, as I will argue further on, important differences between these two trajectories and the associated realities.

Family farming is a useful concept in that it refers to legal relations. On a family farm the family owns the main resources, decision-making is located within the family and the bulk of labour is provided by the family. This definition focusses on the institutional side and is very helpful in distinguishing family farming from corporate farming. However, it leaves aside the socio-material dimension: the (somewhat reassuring) notion of family farming does not specify how resources are mobilized, combined and developed or how production is organized and developed. It does not entail any specification of how the farm relates to nature or to society. To address these issues another concept is needed: that of *farming style*. A farming style specifies how the processes of production and development are structured. A

farming style relates the patterning of these processes to the farmer's cultural repertoire and to the set of relations that link the farm to markets, technology and state policies. Wageningen has a rich tradition in farming styles research. This tradition has helped us to understand the large heterogeneity that exists in agriculture, ranging from more peasant-like to more entrepreneurial styles of farming. And it is precisely at the interfaces of the two that the new divides are emerging.

Entrepreneurial farming is a major threat to peasant farming (which represents the large majority of farmers and farms) and it is at odds with the new scarcities that society at large is facing (climate, water, employment, food). Nonetheless, under the veil of addressing *all* family farmers, agricultural policies are increasingly shaped in a way that mainly, if not exclusively, channels the benefits towards the entrepreneurial pole, whilst the costs are distributed over all farms or even paid mainly by the peasant pole. Mainstream discourse employs a range of justifications for this. However, in this address I will argue that such biased policies can be likened to betting on a lame horse.

Peasant-like and entrepreneurial agriculture

Peasant agriculture is a land-labour institution that has existed for thousands of years. It ties land and labour together in a distinctive way and sustains a mode of farming that not only has been able to face changing times but which is also able to successfully adopt itself to a bewildering range of contrasting ecological and socio-economic conditions. It has been represented in many different ways and many different narratives have been employed to announce its impending disappearance. Nonetheless, there are nowadays more peasant-farmers than ever before and the future of the world critically depends on them: one reason for this is that peasant agriculture provides the world with at least 70 % of its food (Samberg et al, 2016).

Peasant agriculture can be defined as grounded on a self-controlled resource base. That is to say, the resources needed to produce food, fibre or whatever are largely available in the farm itself. These resources are part of the patrimony of the farming family and pass from one generation to the other. The self-controlled resource base embraces *living nature* which is embodied in the land, crops, animals and the local eco-system and *the capacity of farmers* to know, deal with, develop and convert living nature into food. Having such a resource base allows for autonomy and control over production and development. The self-controlled resource base represents "space for manoeuvre" as Norman Long (2001) argues - it allows peasant producers to go against the grain. Closed cycles (i.e. cattle that produce manure that goes to the fields and the soil, into crops, cattle feed and back to the cattle) play a crucial role: they enlarge autonomy. Well-bred manure implies that no or very little fertilizer needs to be purchased. A good grass-land production offers the luxury of buying no or few concentrates. A well-composed alimentation creates less stress in the herd and increases longevity. The breeding and selection of animals is also internal to the farm and reduces the risks of importing health problems. Peasant agriculture is "farming gently" (Zuiderwijk, 1998), yet it is highly productive (Larson *et al.*, 2012). Peasant farming cares for nature and it also cares about the links that relate it to wider society.

Farms have many different balances and the key to the success of a peasant farm is achieving a good equilibrium (Chayanov, 1925). This applies not only to agronomic balances (between e.g. the carrying capacity of the land and the number of animals) but also to socio-economic balances. The labour power available in the family farm and the productive capacity are carefully aligned and periodically adjusted. The saving capacity and the rhythm of growth are also balanced. All this occurs according to cultural repertoires that are part-and-parcel of different farming styles. A well-balanced farm, wherever it is, is perceived as a ‘beautiful farm’ and when it comes to a positive balance of saving capacity and growth (that is, the balance of assets and debts) the farm will be referred to, at least by Friesian farmers, as a ‘free farm’ (Ploeg, 2013). Having a well-balanced and free farm is, as recent times have shown, highly relevant in times of crisis: it translates into resilience. At the same time it turns out that this type of farm is highly appreciated by wider society.

These features are the basis of the many commonalities that can be found between peasant agriculture in Europe and peasant agriculture in the Global South. While there might be many differences in income level, well-being, prospects and social position – the ways in which peasant farmers structure the production and development of their farms are basically the same. Peasant agriculture is not restricted to the Global South. There is also much peasant-like agriculture in the Global North. Yet institutionalized science has lost its capacity to recognize peasant agriculture, to theoretically represent it and to adequately support it.

Entrepreneurial agriculture is structured in a way that differs very much from peasant farming. In the first place it is not based on an autonomous resource base. Instead it is grounded on more or less permanent commodity flows. The main resources, such as feed and fodder for the cattle, fertilizers, young animals to replace the older ones, and seeds, are mainly, if not completely, purchased from different markets instead of being produced (and reproduced) in the farm (or wider farming community) itself. The same applies to knowledge, machine services and the capacity to finance machinery, equipment, buildings and, more generally, the development of the farm: here credit has definitely taken over the role of savings¹ generated in the farm itself. All this implies that entrepreneurial farming has basically become a *financial* operation: it is about money invested in the purchase of resources needed to produce in order to obtain more money so the financial liabilities can be met. This is fundamentally different from the logic of peasant farming where nature and labour are combined in order to efficiently produce food for the market.

Entrepreneurial agriculture has given rise to new identities. The typical agricultural entrepreneur is no longer primarily the skilled farmer who loves farming. He or she tends to become a merchant, a manager and, yes, a bit of a speculator.

In the early 1970s I collected jokes told in the countryside. In retrospect it is telling that many were about the relation between farmers and banks. One of these is about a farmer calling the director of his bank: “I am leaving to have a holiday”, the farmer says. “Fine, good for you”,

¹ Labour investments (improving soil quality, constructing one’s own buildings or equipment, etc.) and the purchase of second-hand machinery play a similar role.

replies the banker, “but why tell me”. “That is obvious”, the farmer says, “since most of these cows are yours, I now want you to take care of your share of the milking. To me that seems normal”. People often use jokes to explore, new uneasy situations and express their discomfort. Nowadays one hardly notes such jokes. High levels of indebtedness are the new norm. The total debts of Dutch farms (loans within the family excluded) amount to 30 billion Euros. That is 10 to 15 times the total agricultural income earned on these farms (which fluctuates between 2 and 3 billion per year).

The genesis of the entrepreneurial project

Entrepreneurial agriculture has been created by, and through, the modernization project of the state. Modernization is a megaproject that is state-driven and which critically requires the state². It is an organized, multi-level and long-lasting operation to align agriculture with the global interests of capital and the specific interests of the agricultural and food industries. In the north-west of Europe this project started after the Second World War, it gathered momentum during the 1950s and became hegemonic by the end of the 1960s. In the Global South similar projects have been driven forward under the banners of the Green Revolution and ‘integrated rural development’.

Science has played an important role in modernization processes, the Green Revolution and ‘integrated rural development’. More specifically it can be argued that the role of science has been decisive in the genesis and development of entrepreneurial agriculture – both instrumentally and ideologically. It has achieved this decisive role by redefining agriculture. In classical agronomy agriculture was understood as ‘what farmers were doing’. In the 1930s agricultural sciences started to perceive agriculture as an application of the laws of biology, chemistry, physics and economics. The application of the laws underlying these disciplines has led to the construction and development of technologies and organizational models designed to ‘improve’ and ‘develop’ agriculture. As Koningsveld summarised: “Agricultural science engages in systematic research of the natural processes relevant to agriculture as depending on conditions to be created through technical interventions” (1986:46). What science has stripped away is man, labour, soil and soil biology. Science was not, and largely still is not, able to deal with such unpredictable entities and so has left them outside of the equation.

Mazoyer and Roudart (2006) wrote an impressive history of world agriculture. When referring to the pre WW 2 period they talk about ‘*les paysans*’. However, in their description of the decades after the war these peasants seem to have disappeared: when describing this period they no longer use the word peasant. Another historian, Eric Hobsbawn declared the post WW2 era to be the epoch of the “death of the peasantry”. From an intellectual point of view it is intriguing to refer back to the great scholars who lived and worked in that period, who helped to shape the transition that took place. Mendras (1984), Hofstee (1966), and many

² The main contradiction entailed in today’s agriculture (and especially in agricultural policies) probably is that, on the one hand, the state encourages a repetition of the modernization project whilst, on the other, it is withdrawing from the markets. This contradiction is mirrored by the inability of large, intensive and rapidly growing farm enterprises to adequately respond to the volatility of deregulated and globalized markets.

other great intellectuals went to considerable lengths to specify the difference between peasants and the new agricultural entrepreneurs who were supposed to offer the promise for the future. Let us briefly examine their reasoning.

Firstly there was the relation with the land. Peasants were tied to the land. They loved their land, but sometimes also hated it. The land was testimony to their (and their ancestors') blood, sweat and tears, of their ongoing efforts to improve soil biology and soil fertility. Peasants knew their land, every corner of it. They themselves had made the soil into what it was, it was their pride, sometimes their curse. And they were definitely knowledgeable about it. However, the '*entrepreneur agricole*' had, according to Mendras, a very different relation with the land as he could make ample use of chemical fertilizers and the findings of applied soil science. Thus the umbilical cord that united the farmer and his soil was cut.

Secondly, the new entrepreneur faced the need for, and challenge of, new investments. Throughout agrarian history there have always been *labour* investments, but now the tractor, the combine, and new buildings required huge *financial* investments: New technologies had to be acquired and this made for a third change: credit was needed to finance the new technologies. In the Dutch tradition, headed by Hofstee and van den Ban the fear about, or acceptance of, credit was the line of demarcation between the two groups of farmers: peasants avoid credit as much as they can, while entrepreneurs embrace it and make it into the main tool for farm development.

The ample use of credit brought a fourth change. It obliged farmers to become 'entrepreneurs'. They had to "*jouer le jeu économique moderne*" (Mendras 1984 p.171). This implied a new calculus, that fundamentally differed from that of the *paysans*, summarized as "*être libre, manger son pain et respecter la nature*" (*ibid* p. 171). For Mendras, this attitude absolutely did not imply that the peasantry represented stagnancy. The good peasant, he wrote, "disposes of the required means of production, works very hard and achieves progress" (*ibid* p. 181).

A fifth change, according to Mendras, related to the context in which farmers operated. Peasants were subject to a suppressive moral economy that dominated peasant communities – by contrast the new entrepreneurs were supposed to be free, unbounded and able to make rational decisions.

At this point it is interesting to refer to the work of the great Bruno Benvenuti. In a meticulous way he spelled out how the new entrepreneurs were bound – again – by a Technological-Administrative Task Environment (TATE) that prescribed and sanctioned their choices. More generally, Benvenuti (1990) noted that entrepreneurship in agriculture was rarely defined in positive terms. It remained a negative definition. It was said that entrepreneurs no longer operate as peasants. However, the concept of an entrepreneur farmer was not translated in a clear script that specified how to make a 'good business' out of farming. The free entrepreneur turned out to be a fiction - a 'virtual farmer' constrained to implement practices prescribed by scientists and agricultural policy makers. Typically, Benvenuti (1983) entitled his inquiry into entrepreneurship: "*a la ricerca di una fantasma*", which translates as 'looking for a ghost'.

I delve into these aspects of history to argue that today we are witnessing a kind of U-turn. While the protagonists of modernization dismissed the connection between man and the land as irrelevant, we are currently seeing a return to the specificities of soil, the local and the knowledgeable farmer. The beautiful valedictory address given in this building by Lijbert Brussaard (2016) is a case in point. Agroecology, now a widespread social movement, is another (Altieri *et al.*, 2011). Soil fertility cannot be maintained solely with chemical fertilizers –soil biology is also crucial. Soil is not something that has just been there since Genesis. It is, as Johan Bouma (1993) and Martijn Sonneveld (2004) have argued, a *phenofom*: the outcome of co-production, of the ongoing interaction between man and living nature. Consequently, knowledge of the soil cannot be standardized and encapsulated in abstract general categories. Critically one needs to work the soil to have any real knowledge of it.

The same applies to credit. We now know the terrible dangers that come with financialization, just as we know now, far better, the dangers of '*le jeu économique moderne*'. We now, more than ever before, know the truth of Polanyi's observation: "leaving the fate of soil and people to the market would be tantamount to annihilating them" (1957:131) .

There is irony in this history. Scientists and policy makers dismissed the importance of caring for and having a strong linkage with the soil and considered that farmers who were reluctant to take on high debts would doom themselves to economic irrelevance. This allowed them to write-off, at least conceptually, the peasantry. However, 5 to 6 decades later these same features once again play a central role in the debate: they are at the heart of today's agrarian crisis. Soil fertility has decreased enormously in many parts of the world, whilst the farmers' debts and the unwillingness or incapacity of banks to refinance them represents another major threat to the continuity of food production. In short: the entrepreneurial model, which promised to render the peasant redundant, failed precisely where it was thought to be superior: going beyond the limits of the ecosystem and faring solely on the logic of the markets. Consequently, it is now argued that we need the peasant once again. Not yesterday's peasant, but peasants of the 21st Century (Ventura and Milone, 2007). Their care for, and knowledge of, the soil and their prudence in dealing with the capital market are much needed ingredients in today's agriculture. This desire for a repeasantization of agriculture was accompanied by the insight that peasants, as a matter of fact, never disappeared - we just stopped recognizing them.

This re-examination of the intellectual sources of the modernization project, which was supposed to either turn peasants into entrepreneurs or, if not, make them disappear, should also generate a call for modesty. Science often easily claims to provide all-embracing changes and solutions. It happily supports and contributes to mega-projects (Scott 1998). Wageningen University currently excels in all this. But history teaches that we should be more modest and that internal debate, reflection and critique are more needed than ever before. History also shows that things such as the much-touted 'corporate identity' and 'One Wageningen' philosophy are potentially very dangerous.

Scale increases as a 'forward escape'

The dependence of entrepreneurial agriculture on the capital market has far reaching consequences. In the first place it means that technological artefacts are no longer instruments to facilitate and improve the process of production: rather they enter the farm and function as capital that needs to be valorised. Buildings, land, technologies, animals and other resources are no longer patrimony (as in peasant agriculture) but, being grounded on credit, they start to function as 'capital' that needs to generate a 'profit' to allow for repayments, interest (and for new lines of credit). This is a fundamental change within agriculture: this financialization, as it is now called, has led to a widespread, albeit far from total and complete, change towards entrepreneurial agriculture.

The central role of capital within entrepreneurial agriculture implies that developing a farm enterprise becomes, as French colleagues have observed, '*une fuite en avant*'. Capital induces the need to continuously expand the farm. This is especially the case when markets are volatile: relatively low margins and the prospect of sudden drops in price-levels turn ongoing, if not accelerated, scale increases into a material need.

These increases in scale occur through take-overs. Entrepreneurial farms expand by taking over the resources (land, quota, market shares or images) of others pushed out of the agricultural sector. This translates into agricultural development becoming a regressive phenomenon: the total net value added is reduced and simultaneously redistributed in a more unequal way. This represents a sharp contrast to peasant-like development patterns that enlarge the total net value added of the primary sector as a whole and ensure a degree of equitability.

This contrast was clearly and convincingly demonstrated by long-term research conducted by the National Centre for Applied Research in Dairy Farming in Lelystad (Kamp and Haan, 2004; Evers *et al.*, 2007). In the second half of the 1990s a comparison was made between running a farm in a 'low-cost' peasant-like way and doing so in an entrepreneurial-like 'hi-tech' manner. Both farms were designed to obtain a level of income comparable to the urban average and both were designed to be run by one person. Those were the similarities. In all other aspects the two farms differed significantly: the technological level, the animal breed, input use, etc., were all different. In fact, these differences reflected the empirical differences between the peasant-like and entrepreneurial styles of farming in the Netherlands. The outcome was amazing: both farms produced the same income but the entrepreneurial farm needed a quota twice as high as the one of the peasant-like farm (800,000 versus 400,000 kg. of milk per year) in order to do so. If we project this to the dairy economy of the Netherlands as a whole this points, at least theoretically, to there being enormous room for manoeuvre. According to these research findings, the total output of the Dutch dairy industry in the mid-1990s (10 billion kg. of milk) could be supplied by anything between 12,500 to 25,000 farms. That is far from irrelevant. Shifting from peasant-like forms of production towards entrepreneurial farming substantially reduces employment and the total income generated – not just once but continuously.

These comparisons might well lead us to conclude that entrepreneurial agriculture is a very expensive option. It may be an attractive option for banks, agro-industries and large retailers.

However, for the farmers involved it often turns out to be a reality that fails to live up to expectations.

The importance of peasant farming

A few years ago the High Level Panel of Experts (2013) of the Committee for World Food Security of the FAO discussed the need to invest in smallholder agriculture, stressing the importance of peasant agriculture. Peasant agriculture, the Panel argued, contributes positively to food security, overall economic development, employment and income, productivity, sustainability, landscape, biodiversity, climate, emancipation and cultural heritage. Peasant agriculture not only makes positive contributions, it contributes considerably *more* than other modes of farming, both in the Global North and in the Global South. In a recent set of studies (organized and published by the FAO)³ on family farming in different continents this has been convincingly reiterated. Peasant agriculture is important to the world – at least, if it has the space, the room for manoeuvre, to make a contribution. Denying peasants such space is not only a direct threat to the livelihoods of hundreds of millions of people all over the world – it also poses serious threats to food security, sustainability, overall economic development, etc. However, entrepreneurial agriculture and the policies that support it are continuously and voraciously devouring this space (Ploeg,2008).

Emancipation: an as yet unfinished challenge

The agrarian history of Europe has seen important episodes during which poor landless people were trying as hard as they could to obtain a small piece of land in order to start farming and thus gain at least a minimum of autonomy, dignity and wellbeing. My grandfather (I proudly carry his name) was one of them. He was a rural worker who travelled back and forth from Friesland to Germany and Holland in order to earn a living milking cows and harvesting hay – for others. On one of these trips he encountered a young lady who later would become my grandmother. They got engaged and remained so for seven years. That was how long it took to save enough to have one milking cow and one pig. Having a cow and a pig was assumed, at that time, to be the minimum requirement for settling down, renting a piece of land, getting married, starting a small farm and raising a family. Having their small farm and developing it through hard work was their pride and it allowed them to send one son to the secondary school and then to teacher training college. This son became schoolmaster who, on his turn, could send a son to the agricultural university. This is how emancipation proceeds and this is precisely what the present-day structuring of the production, processing, trading and consumption of food denies to many millions of others– who are in dire need of emancipation.

Peasant agriculture allows for emancipation, and is also the outcome of emancipation. Self-controlled resource-bases have been constructed through many-sided and continually repeated social struggles. In many places in the world men and women continue to struggle for land, seeds, water, access to markets and services. Once such a self-controlled resource base is

³ Published by the International Policy Centre for Inclusive Growth (IPC-IG) of the United Nations Development Programme (UNDP) and available at www.ipc-undp.org

constructed people's emancipatory aspirations (e.g. to improve one's own livelihood, create new starting points for the children, etc.) become the major driver of agricultural growth and development. The simultaneous improvements in production (in quantity and/or quality) and the betterment of livelihood are the wheels that move agrarian history forward and provide food to an ever growing world population.

There are no grounds whatsoever for arguing that the emancipatory role of peasant agriculture has come to an end (or that growing urban economies can completely take over this role). In Latin America, Asia and Africa this definitely is not the case. In the decades to come, there will be hundreds of millions of young people who need to develop a livelihood in the rural. In the Mediterranean area there already is a strong flow of young people into the countryside who are developing amazingly novel farms (Morel, 2016). And, here in the Netherlands, everybody complains that farmers are getting older and older, but nobody opens effectively the door for youngsters.

Emancipation never comes as a mere gift: it never occurs without socio-political struggle. The required space needs to be conquered and then defended. Here I want to make three observations. The first regards the strengths and weaknesses of peasant movements. Peasants might seem to be located at the margins: they are small and can easily be overlooked. Nonetheless, they are at the same time central in the supply of food (as beautifully expressed in the somewhat enigmatic painting reproduced here in Figure 1). They are simultaneously peripheral and central: weak and strong. Both are true, since we are facing here contradictory realities that are continuously changing. But through these changes run some important continuities. The socio-political strength of peasant movements is rooted in two commonly shared rights (or 'commons'). These are access to land, water, seeds or more generally: access to nature. This is an undeniable right that constitutes a common. The other is the right to food, the right to enjoy food and the associated right to engage directly with the producers of food. These two commons, access to nature and the right to food, are central to civilization – and this gives peasant movements an enormous potential strength and the possibility to ally with others.

Figure 1: Marginal but also centre stage



Secondly, we have to keep in mind that peasant struggles not only occur through manifestations, road blocks, burning a McDonalds or destroying experimental fields with GMOs. They also occur as constructive and innovative practices that aim to transform production, processing and distribution and that together carry the potential of a full-swing transition. The single practices might appear to be insignificant – at least to the scientist and the politician – together they might compose an important socio-political force and a promise for the future.

My third observation regards the societal significance of peasant movements and struggles. They currently represent the main antithesis to the global and oligopolistic networks that increasingly control the production, processing, distribution and consumption of food. Where such food empires control markets, peasant movements are creating new peasant markets and arguing for the principle of food sovereignty. Where food empires aim to monopolize genetic material, peasant movements defend the democratic access to living nature. Where food empires actively induce poverty and marginality, peasant movements fight for emancipation. In short: peasant movements are an indispensable part of the checks and balances that keep our societies liveable.

I want to underline the importance of peasant agriculture with two specific examples. The first condenses the recent history of peasant farming in China, the second will bring us back to the Netherlands.

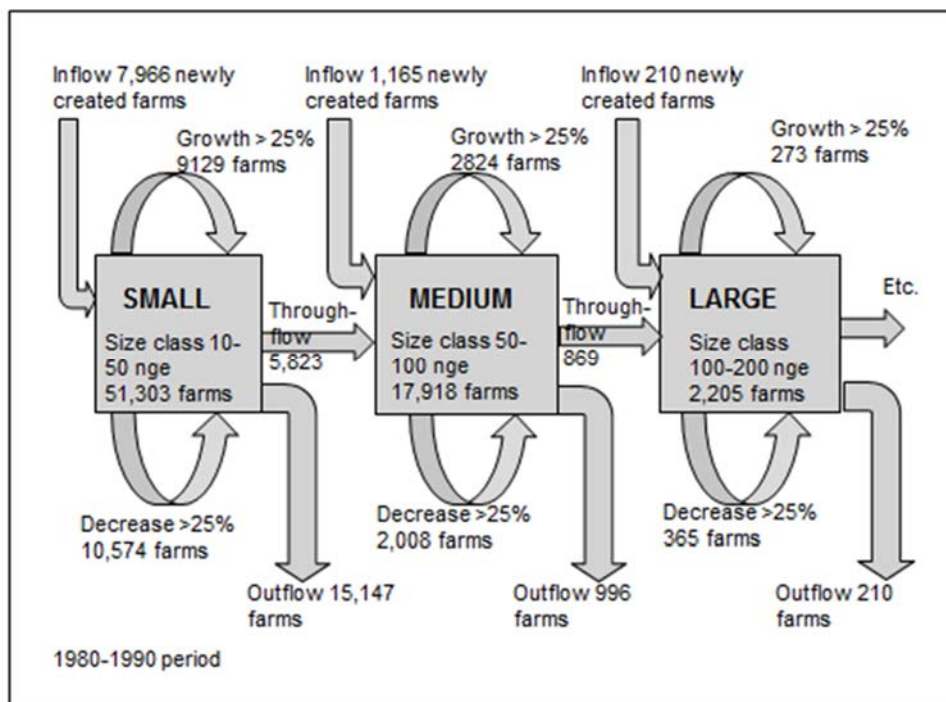
China: labour-driven intensification

Over the past ten years I have had the enormous privilege of being connected to the China Agricultural University in Beijing – more specifically the College of Humanities and Development Studies headed by my friend, professor Ye Jingzhong. This has allowed me to come to understand, at least a bit, the dynamics of Chinese peasant agriculture. The average peasant farm in China is 5 mu: that is one third of a hectare. According to conventional wisdom that is too small to earn an income from, let alone to invest and to develop. Nonetheless, over the last three decades and a half China's peasant agriculture has been growing and developing continuously and total factor productivity has increased considerably (Ploeg and Ye, 2016). Development occurs here as labour-driven intensification in which the quantity and quality of peasant labour are decisive. There is an important consequence to this: poverty nearly has been eliminated. Today you will find a satellite receiver on nearly every peasant house and inside the house a big flat-screen television. In all these respects China is the opposite of Africa – the playground of so many Western-led 'development' initiatives. All this is very important: it convincingly expresses the strength and productive potential of the peasantry, just as it highlights the enormously important role of women and the significance of multiple job holding. But underlying this there is, I think, yet another level: the Chinese experience clearly shows that alongside the entrepreneurial agricultural model of the West, one might very well outline an alternative development paradigm in which peasant agriculture is the main carrier of food sovereignty. As several research teams have convincingly shown the key to poverty alleviation and food security is not technological innovations, but pro-rural, pro-peasant and pro-poor policies (Donaldson, 2011; Henley and van Donge, 2013).

Netherlands: the sturdiness and relevance of small farms

Does this have any relevance elsewhere? Let us return to the Netherlands. Figure 2 summarizes the developmental dynamics of one part of Dutch agriculture: it shows that the 71,540 farms with grazing animals that existed in 1980 and how they developed over the following decade. It is important to add that Figure 2 is not based on agricultural census data, which only shows aggregate changes, but on the rarely-used Dutch mutation data base that allows us to follow individual farms through time.

Figure 2: Differential dynamics in Dutch agriculture (farms with grazing animals, 1980-1990)⁴



The Figure shows that many farms do indeed disappear. But this not only occurs among small farms – it also happens in the categories of medium and large farms. Figure 2 also shows that apart from this outflow, there is also an inflow: during this 10 year period 9,359 new farms were created. Growth occurs in all size categories and strong growth (>25%), occurs mostly in the category of small farms: 17.8% of these grew strongly as opposed to 12.4% among large farms. This growth often results in a ‘through flow’: small farms becoming medium farms, and medium farms developing into large farms. This is partly due to the emancipatory drive, mentioned earlier. Finally there is decline. And again the empirical evidence goes against what is normally expected. There is a strong decrease (>25%) among all size categories – even among the large farms. Hence, the overall picture is far more complex than the simple mantra: ‘small farms will disappear and large farms continue to grow⁵’.

⁴ NGE is a measure for the economic size of farms.

⁵ For a more detailed analysis of this data and its implications see Ploeg, 2016.

Table 3 shows the same set of farms, following them till 2006 (the last year for which this dataset is available). It shows the net contribution (that is growth minus decrease and outflow) that different size units make to the overall growth of the agricultural sector in the Netherlands for small, medium, large, very large and mega farms.

Table 3: The contribution made to total agricultural growth by different size categories of Dutch farms with grazing animals (1980-2006)

Size category (departing from the 1980 situation) in nge	Net contribution to total growth (measured in nge)
< 50 nge	175,416
50-100 nge	258,913
100-200 nge	37,979
200-400 nge	3,237
>400nge	119

To summarise briefly: small farms contributed nearly 5 times as much to overall growth than large farms. This is due, of course, to the sheer number of small farms. Individually, they develop and grow in a modest and step-by-step way. But multiplied by their large number this makes for a substantial contribution. The contribution of medium sized farms stands out even more. Single large farms might grow in a very impressive looking way but since they are limited in number they contribute far less to overall growth. And when we look at the very large and the so-called mega farms (> 400 NGE in 1989) we can see that their contribution is miniscule.

This empirically demonstrates what has already been said: the policy focus on large farms and the preferential allocation of developmental opportunities to them – enshrined in agricultural policies – is nothing but betting on a lame horse.

The demise of entrepreneurial agriculture

The issues discussed here have consequences that affect society as a whole. Entrepreneurial farms are very much tuned to, and dependent upon, the markets and institutional environment within which they operate. This is how they get the most out of it. However, being meticulously tuned to markets and institutions (policy included) makes the entrepreneurial segment quite vulnerable, if not fragile. Whenever there are unforeseen and/or abrupt changes in the economic and institutional context this segment falls ‘out of line’ and has little capacity to adapt (due to path dependency). Turbulence can thus become a major threat for food provisioning – precisely because entrepreneurial agriculture, unlike peasant agriculture, has a limited ability to absorb shocks. Instead, it magnifies them. Empty stables and large fields

laying barren (as can be seen in large parts of South Africa, Latin America and Asia) exemplify this vulnerability. But, such scenes may not be far away in Europe either. In 2008/2009 dairy farmers faced a drastic reduction in milk price. As a consequence many farms experienced a prolonged period of negative cash-flow. This was particularly problematic for the specialized, intensive and large farms that had expanded quickly in the previous years and which consequently had high levels of indebtedness (Oostindie *et al.*, 2013; Dirksen *et al.*, 2013). Over the last year (2016), 72% of all Dutch dairy farms were experiencing cash flow problems. If not for the income payments (53,260 Euros per year for large farms as opposed to just 6,780 for small farms) these entrepreneurial farms, that are said to be competitive, would have gone broke years ago. In synthesis: entrepreneurial agriculture is not earthquake-proof. It may all too easily collapse. If, and when, this occurs it will certainly negatively affect food provisioning.

Repeasantization

Globalization, deregulation, the rise of entrepreneurial farming, imbalanced state policies, the growing hegemony of food empires and, more recently, the new wave of land grabbing (Ploeg, Franco and Borras, 2015) have made havoc of the prospects of many millions of peasant families. In many places this has resulted in strong processes of depeasantization. Nonetheless, we should not forget that recent times have also seen sturdy processes of repeasantization in other places. In 1979 in Anhui, rural workers in China challenged the tyranny of collectivism and thus provoked a process of repeasantization that has resulted in the creation of 200 million new peasant farming units. Brazil was the location for yet another watershed: through land occupations and subsequent *campamentos* the MST (*Movimento dos Sem Terra*) generated 400,000 new peasant units of production that, between them, cover an area equal to the total agricultural area of Switzerland, Portugal, Belgium, Denmark and the Netherlands taken together.

Europe, in its turn, has witnessed the wide spread development of multi-functionality, the further unfolding low-external-input farming (which is now being carried forward under the logo of agro-ecology) and the creation of new markets (Hebinck, *et al.*, 2015). These new developmental mechanisms have all emerged as responses to the squeeze upon agriculture exerted by food empires and they simultaneously translated as repeasantization: that is to say agriculture is once again becoming more peasant-like and is also attracting new entrants, especially young people who are enlarging the rank and file of the peasantries. It is important to stress that on-farm food processing, agro-tourism, farmers' management of nature and landscape, the creation of new markets, etc. – are not only activities that are additional to farming. Instead, they are helping to re-pattern farming. They are an expression of 'farming differently' as convincingly shown by Henk Oostindie (2015) in his recently defended thesis. It is farming that definitely differs from the entrepreneurial-like industrialization of agriculture. It is making farming more "gentle" again.

Finally there is the construction and development of *La Via Campesina*, the proud, sturdy and strong global peasant movement that combines considerable intellectual power and imagination with an impressive amount of agency.

These main historical changes are, I think, tied together by one main thread: the desire of many millions of producers to be independent and self-employed, to be at a distance from the suffocating protocols that are increasingly imposed upon us, and to build their own material and economic foundations so they can both lead a better life and contribute to society as a whole.

A neglected truth

Path-dependency makes alternatives that differ from the mainstream seem irrelevant or not worth considering seriously. Path-dependency makes history look like an inevitable trajectory that cannot be altered. Path dependency leads people to believe that there simply are no alternatives (and, indeed, for those who are materially entrapped this is true). The image of inevitability emerges especially when universities narrow down their horizon of relevance to what they find interesting and promising: the unfolding megaproject of state, science and capital (Scott, 1998)⁶. When this occurs practices that differ from this vision are left unstudied and this contributes to making them invisible. Of course, there is a price to be paid for this. Part of the price is that science misses the many novelties blossoming outside the limited part of reality delineated by its narrow horizon of relevance.

Today there is another feature that strongly contributes to the narrow focus on entrepreneurial farms and especially on the very large ones (also known as mega-farms). This is the strategy to turn the Dutch countryside into a ‘showroom’. As Dutch exports of food slow down (especially those based on primary production within the Netherlands), the export of agricultural models, designs, technologies and software is seen as a new pathway. Thus, there is an emerging alliance between Dutch agricultural engineering capabilities and capital groups on the one hand and oil states and other countries from the Global South on the other: the mega farm is what the former are able to design, and it is what the latter want to buy. However, the message that such farms are not wanted by the general public, or even forbidden in many areas in the Netherlands, would not really be a good commercial sales point. This, I think, explains the emphasis agricultural sciences are currently giving to ‘the 2.0 version’ of the entrepreneurial model, even at a time when version 1 is being questioned on a number of grounds.

What are we heading for?

We are moving⁷, I believe, towards an agriculture made out of many richly-chequered, mutually-cooperating peasant farms that are strongly embedded in, and interwoven with, the regional economy through newly constructed nested markets (Ploeg, Ye and Schneider, 2012). These farms are indispensable elements within the circular economy that we have to

⁶ This megaproject typically aims to construct a future that radically differs from the empirical realities as we know them now. Equally, it is disconnected from the experiences, views, prospects and emancipatory aspirations of the many millions involved in these realities.

⁷ This section draws strongly on Chayanov, 1920; Raad voor het Landelijk Gebied, 1997 (especially pp. 17-20 entitled: ‘schets van het landelijke gebied in de 21e eeuw’), USDA, 2007 (which refers to smallholdings in the USA as ‘cornerstones of the regional economy’) and European Parliament, 2014.

construct. Skill, joy, care and gentleness are key aspects on these farms. They make extensive use of new technologies that allow for small-scale and local processing of food and raw materials. The actors involved proudly identify themselves as “peasants of the XXI Century” (Ventura and Milone, 2007) or as “neo-paysans” (d’Allans and Leclair, 2016). In the Global North this new agriculture is felt as a relief, as a luxury – for we can afford ourselves to go beyond the crude agro-factories that some promote. In the Global South it is equally felt as a relief – but for another reason. A generalized peasant agriculture offers many millions of people the improved livelihoods and the emancipatory possibilities they have been longing for so long. Meanwhile, the universities need to recognize that trying to understand, and to build upon, the dynamics of peasant agriculture is far from being an intellectual deficiency. Transdisciplinarity is what links these universities and the different peasant realities.

Where does peasant studies stand today?

Over the last two decades the gravitational centre of peasant studies has clearly moved to China, Brazil and Italy. Apart from being hotspots of repeasantization, these countries also have supportive institutional environments. Together with the universities of Yale, Cornell and Toronto, SOAS in London and ISS in The Hague, this makes for a strong, extended and vibrant network for truly comparative and theoretically informed peasant studies. In the past Wageningen had a rich tradition of peasant studies that focused on both Europe and Asia. Egbert de Vries (1948) and Willy Johan Timmer (1947) were leading exponents, but scholars as Edelman (1943), Roessingh (1976) and several others also made important contributions.

Curiosity about, inquiry into, and involvement with the peasant world re-emerged in the early 1970s with the formation of the Peasant Foundation (Boerengroep). This group developed peasant studies outside of the university but in critical dialogue with it. And this has certainly rendered results. There are places, albeit only a few, in the university that enable students to come to know about and critically reflect on peasant agriculture. There are colleagues doing wonderful work that reflects and strengthens different aspects of peasant agriculture. To mention a few: Lijbert Brussaard who has put soil biology centre stage once again; Pablo Tittonell, Jeroen Groot and Walter Rossing who time and again highlight the productivity and sustainability of peasant agriculture; Rutgerd Boelens, Margreet Zwartveen and other friends from the irrigation group. And of course I should also mention my direct colleagues (Dirk Roep, Henk Oostindie, Rudolf van Broekhuizen, Han Wiskerke, Paul Hebinck, Jessica Duncan, Gerard Verschoor, Gemma van der Haar and others). Finally, there is the extended group of former students and former colleagues who decided to become farmers themselves (such as Joop de Koeijer, Freek van Leeuwen, Marije Klever and Vincent de Lobel) or to operate in NGOs that are closely linked to peasant agriculture here in the North West of Europe or elsewhere (as done by Frank Verhoeven, René de Bruin and Nico Verhagen).

Together with a considerable number of active and innovative peasant farmers (such as Fokke Benedictus, Piet van IJzendoorn, Monique and Koos van der Laan, Jan Dirk and Irene van de Voort, Attje Meekma, Douwe Hoogland, Max van Tilburg, Gerrit Marsman, Teunis Jacob Slob, Sjoerd and Wiek Wartena and many others), these people constitute a network that keeps the promise of, and claim for, peasant agriculture alive and kicking. As a matter of fact,

this network puts us in a far better position than, say, 45 years ago. Peasant studies is now integrating both the social and the technical; it is able to understand peasant agriculture from the Global North and the Global South within one and the same theoretical framework; it has materially influenced the development of our agricultural sectors; it is able to contribute vividly to international debates; and it is helping to find, in different localities, new institutional arrangements that help to strengthen peasant agriculture in novel and productive ways (Roep, 2000; Daniel, 2011). Alongside this we see that, initially small, peasant initiatives (such as the first associations for the agricultural management of nature and landscape, the first experiments with local self-regulation, the first peasant markets and the first multifunctional farms) are now firm and convincing constellations.

I am proud to be part of this network.

There have been difficult times but on the whole I have experienced Wageningen University as an energising, inspiring and attractive place and a stimulating setting for intellectual work. Wageningen provides a great context that allows for direct and non-commodified exchanges with many, very knowledgeable, colleagues. I am sure that I could not have become what I am today outside the context of the dedicated intellectual community in and around Wageningen University

I am very grateful to my colleagues. Interacting with, teaching and learning from, students has been a permanent inspiration and pleasure.

And then there are those who I love, with whom I started this journey many years ago and whom, thanks God, are still with me: Sabine, Jan, Adriaan and Jarl. I am especially happy that this initial 'gang' has been enlarged, since then, with Tessa, Lisa, Mare, Aafke and Martine.

Mister Rector Magnificus: "Ik heb gezegd". Ladies and gentlemen, thank you for your attention.

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