THE DRIVERS OF CHANGE: THE ROLE OF PEASANTS IN THE CREATION OF AN AGRO-ECOLOGICAL AGRICULTURE

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Summary

This article discusses the interrelations between peasantry, agro-ecology and the current process of re-peasantization that emerges as the highly differentiated set of responses peasants use to face, and to respond to, the current agrarian crisis. A key argument is that agro-ecology needs the peasantries of both the North and the South as decisive social carriers.

Keywords: Agro-ecology, peasants, crisis, food-production

Introduction

In this article I aim to discuss three interrelated issues. The first is that agro-ecological practices need a specific social carrier: a social force that actively moves agroecology forward. I will argue that the peasantry is such a force. As a matter of fact: it is to only social force that is able to make agro-ecology into movement that transforms agriculture into a sustainable practice.

This may sound as a platitude. However, this first point is far from being banal or time-worn. Nearly all available theories declare, in one way or another, the demise of the peasantry. Peasants are considered to be inefficient, conservative and unwilling to change. They are doomed to disappear (and even that is done in an inefficient way) in order to create space for more largescale, more specialized and more productive forms of production. This points to the second issue. I think that potentially agro-ecological theory is the only framework that allows for a reconsideration and renewed appreciation of the peasantry. I stress this opportunity as being a potential one. In the agro-ecological movement as a whole there is often as well considerable confusion when it comes to understanding the peasantry.

The third point I want to make is that, regardless of all confusion, the development of agro-ecological realities already occurs as a re-peasantization. It is making agriculture more peasant-like, just as it is driven by actors who strengthen their peasant identity. In this respect autonomy and resistance are important keywords. I will link the discussion about this third point to a more general observation: it is only through the combined processes of re-peasantization and the development of agro-ecology that the world can feed itself in 2050, when the world population will reach its highest point.

Who drives agro-ecology?

Agro-ecology might be specified at three levels. Agro-ecology is a critical *theory*. It composes a radical critique on the ecological, agronomic, social and economic dimensions of the increasingly industrialized agricultural systems of the world and on the often dramatic impact these systems are having. Simultaneously this critique embraces an alternative: it outlines modes of farming that entail dynamic equilibriums with nature and society and which are in line with the interests and prospects of the involved actors. Secondly, agro-ecology is a *practice*. It is the practice of those who are applying (explicitly or implicitly) the alternative insights that are accumulated (and elaborated further) at the level of theory.

There is a strong dialectical relation here between theory and practice. Theory reflects practice, and practice nurtures theory. Theory might criticize specific expressions and tendencies within the different practices (agro-ecology is a self-critical theory), just as novelties developed in practices might enrich, or correct, or enlarge theory.

Finally, agro-ecology is a *social movement*. It is a movement, not only of those directly involved in the practice and/or theory of agro-ecology; it might embrace far more actors, i.e. all those who are interested a good and safe food, in a clean environment, in social justice and in well-equilibrated relations between town and countryside.

Above all, however, agro-ecology represents the unity of these three levels. It is a unity that produces synergy: it strengthens each level, just as each level helps to strengthen the whole. This unity evidently assumes critique, debate and contradictions. These are used, though, to strengthen, in the end, agro-ecology as a whole.

At the level of practice, agro-ecology represents a specific way (or mode or style) of farming - a specific way that strongly contrasts with dominant patterns of farming. Like all other ways of farming, the agro-ecological way of farming requires a social carrier: a social group that identifies with this particular way of farming, that defends it to material, political, economic and symbolic threats and attacks and that is prepared to developed agro-ecology further. It is a social group willing to join the ongoing dialogue with others in the movement as a whole - it is a group (or maybe we should say it are groups) that are, and that are willing to be) an integral part of agro-ecology as a social movement. However, it are, in the first place, those actors that put agro-ecology into practice. It are those people that materially change the fields (who enlarge e.g. soil biology in order to increase the capacity of the soil to deliver nitrogen), who introduce new, complex cropping schemes (to reduce e.g. the emergence of pests), who experiment with biological control (to avoid e.g. the use of pesticides), who breed new cattle breeds (that far better adapt to locally available feed and fodder and who don't depend on industrial concentrates). Who build new farmers' markets in order to 'by-pass' the big retail chains and to establish direct contacts with urban consumers. Etcetera, etcetera.

To be a robust constellation, agro-ecology needs a *social carrier*: a social group involved in the practical creation and development of agro-ecological practices. In order to be robust and durable over time, it needs to be a group to whom it applies that its own emancipation (the struggle for its own interests an prospects) strongly *coincides* with the defence and further development of agro-ecological practices.

This raises an evident question: who are these actors?¹ Or more generally: *what is the social carrier that creates and further develops agro-ecological practices as a specific way of farming*. Are it youngsters, gifted with a lot of enthusiasm, that are to enter agriculture and who will start from scratch and build new realities? Are it indigenous groups, living at the margins of the industrialized world and who are, therefore, less 'contaminated'?

Undoubtedly, these groups play an important role: they are parts of the social carrier. But the social carrier of agro-ecology is far larger – and potentially it might be extended even far further. The thesis I want to propose here is that important parts of the peasant population of the world² are belonging to this social carrier as well –

2 An associated thesis is that there are far more peasants in

they need to be seen as the central part of it, as the backbone. This applies especially under the circumstances of the current world-wide crisis (that triggers and sustains a specific agricultural crisis as well): this general crisis strongly induces changes within agriculture that tend to make it more peasant-like and that prompts farmers to operate far more as peasants.

But then? What are we talking about when we refer to peasants and to peasant-like ways of farming? I will briefly discuss this issue in the next section.

The nature of peasant farming

From an analytical point of view, farming consists out of three interrelated and mutually adapted processes (see Figure 1). These are the mobilization of resources, the conversion of resources into (end) products and the marketing and re-use of the end products. The first and the third process, and increasingly the second one assume, and *de facto* imply, relations with the markets. However, these can have completely different patterns.

Resources can be mobilized through different markets or, equally, can be produced and reproduced within the farm. This applies to all social and material resources whether cows, feed and fodder, fertilizers, seed, labor, knowledge, working capital, or buildings. They might be obtained through market transactions and enter the production process as commodities. They might equally be produced and reproduced within the farm unit itself, or be obtained through socially regulated exchange. Those resources that cannot be produced physically on the farm (like heavy machinery), can be acquired in different ways: either with one's own resources (e.g. savings) or through creating dependency by borrowing to raise the money. Thus the specific social history of objects can make a very real difference.

Peasant agriculture tends to be mainly based upon non-commoditized resource flows. This implies, in terms of Figure 1, that the internal flow of self-reproduced and self-controlled resources is the most important one; it dominates over the external flow of resources, i.e the resources that are mobilized in the markets³. If, however, commodity circuits play central roles in the mobilization of resources, farming falls within the entrepreneurial (and/or corporate) agricultural constellations. Thus, the 'degree of peasantness' becomes central to the analysis of agriculture. This varies through space and time. Peasant agriculture is less dependent on markets for factors of production and inputs. An increase in such dependency will move agriculture away from being a peasant agriculture and move it towards an entrepreneurial or capitalist mode of farming.

¹ When talking about a social carrier when cannot talk about abstract actors. We need to identify concrete actors, real people in the real world who are engaged in specific practices and are having specific interests, specific cultural repertoires, specific modes of producing, etc.

the world than we normally think. This argument is further in 'The New Peasantries'.

³ In Figure 1 this is referred to as 'non commodity circuit'. On the other hand, markets represent 'commodity circuits'.



Figure 1: The basic structure of farming.

In agro-ecology, on its turn, it is crucial that farming is based, as much as possible, on locally available natural resources (i.e. on the local eco-system) and on the capacity and skills to use these resources in the most adequate and sustainable way. In this respect, labour is strategic, just as the knowledge carried by the labour force. All this implies that agro-ecology implies a type of farming that is very strongly build on the internal and self-controlled flow of resources; agro-ecology tends to avoid as much as possible a dependency on resources that are to be mobilized in and through the markets – especially when it is about agro-chemicals and agro-industry but the search for autonomy is not limited to agro-chemicals alone.

Viewed a little bit differently, it might be argued that peasant farming is an ongoing struggle for autonomy - for the creation of a self-controlled resource base that allows for farming in a way that coincides with the interests, experiences and prospects of the peasant family. Peasant farming is not only about producing milk, potatoes, grapes and wine - it is also, and maybe especially about the creation of such a self-controlled resource base. Because it is the main factor that might secure long run continuity. Alongside this crucial feature there is another, equally important factor: a self-controlled resource-base implies that the benefits of an increased production accrue to the peasant family (an not the landowner who leases the land; nor to the bank that provided credit or the agro-industry and sales company that delivered the main inputs); they even might be used for a further development of this resource-base.

In short: peasant farming is build on an internal flow of non-commoditized resources. Thus, peasant farming is the point of departure, *par excellence*, for agro-ecology. It is equally the 'testing ground' for agro-ecology: a proper field laboratory. And it entails the structure and conditions that will turn it into the main driver of a further unfolding of agro-ecology.

Mechanisms of re-peasantization

There are 6 basic mechanisms involved in the turn to agro-ecology. These are summarized in Figure 2 that builds

on the previous Figure 1. The first mechanism is known as diversification. The farm is not specialized; it does not produce one single commodity (as is often the case in entrepreneurial and corporate farming). Instead, it produces a wider range of products and services that are delivered to a wider set of markets. This reflects one the one had the complex cropping schemes and the integration of animal husbandry and arable crops as proposed in agro-ecology, on the other hand it allows for more flexibility and (relatively) more autonomy. Often the processing of food products on the farm itself and the direct selling are an integral part of diversification. The combination of different activities within one and the same farm allows for the creation of considerable synergy. Then the cost of simultaneously producing more products is lower that the addition of the costs of producing each product in a single way.

The second mechanism regards the *reduced use of external inputs*. This is combined with an improved use of internal resources. This has been the most visible aspect of agro-ecology but it is, of course, far from being the only one. When successful, this mechanism equally reduces the dependency on agro-industry. Instead, the skills, capabilities and knowledge of the farmer are becoming far more important.

The third mechanism, *regrounding farming upon nature*, is often closely tied to the second one. It implies e.g. the revitalization of soil biology, the re-introduction of strategies for biological control and the breeding of animals that can be fed with local resources. This mechanism evidently strengthens the internal flow of resources. It is the outcome of long struggles for autonomy; as such it represents materialized autonomy. The more farming is grounded upon nature (and on the associated knowledge of the farmers on how to use and to reproduce nature), the less dependency there will be on external providers of inputs and knowledge. Concerning this third mechanism, agro-ecology again has made invaluable contributions.



Figure 2: Mechanisms of re-peasantization.

The fourth mechanism concerns engagement in *pluriactivity*. This means that a part of the total family income is generated through work that is done elsewhere. 50

This often regards non-agricultural work and in Latin America it frequently takes the form of international migration. The remittances that are associated with this pluriactivity are important, just as the savings that (after return) are invested in farming. Pluriactivity implies on the one hand often awkward forms of dependency - at the same time, though, it helps to avoid dependency on the banking circuit. Through savings self-controlled financial means are generated (people often refer to this as 'my own capital') that become part of the internal and self-controlled flow of resources. Thus pluriactivity emerges as an important (and temporary) arena within which part of the struggle for autonomy is taking place: once enough savings have been created, people again focus on farming. However, there are also forms of pluriactivity that are permanent; they might be equally important for the continuity and autonomy of peasant farming as the temporary forms. It is sometimes assumed that pluriactivity is especially present in developing countries. This is a mistake: it is as important in the agricultural sectors of developed countries. In the Netherlands, for instance, pluriactivity is a structural feature in some 85% of all farms. On average some 30 to 40% of the family income is derived from it. In moments of agrarian crisis, this latter percentage is far higher.

The fifth mechanism regards new forms of *local coop*eration. Through cooperation and exchange the internal flow of resources might be expanded considerably: it goes beyond the limits of the single farm unit and shifts it to the level of the territory. Well known example are the exchange of seeds, the exchange of labour and animal traction and the collective procurement of machinery. New forms are entailed in the newly emerging territorial cooperatives in Europe (that ironically resemble very much the Latin American peasant communities).

The sixth mechanism aims at *increases in the technical* efficiency of production⁴. It aims at a higher production realized with the same set of resources. This mechanism especially embraces that what is called 'novelty production'. Novelties are the outcome of peasant innovativeness. Novelties are new practices, new activities, new insights, new artefacts and/or new machines that carry the promise to function better than the already available and well known practices, activities, etc. Novelties result from careful observation, from small experiments in the field, from the exchange of experiences (through *campesino a campesino* programs for instance), but also from breeding and selection of animals and the careful improvement of fields and soils. The rebalancing of a wider constellation of interconnected resources might be object of novelty production as well. Territorial cooperatives in the Netherlands, for instance, worked very hard on the rebalancing of animal-manure-soil-plantcattlefeeding relations and in successfully doing so they enlarged considerably their autonomy vis-à-vis the environmental policies of the ministry of agriculture whilst farmers' incomes were simultaneously improved. (see also Figure 3). The possibility to organize learning at the level of a peasant community as a whole was decisive in this development.



Figure 3: An example of rebalancing.

Taken together the six mechanisms (that are described here merely in analytical terms; in empirical reality these mechanisms embrace of course a rich and highly complex range of many concrete expressions) compose a strategic repertoire that tends to enlarge autonomy. It also tends to reground farming on local eco-systems. Finally it tends to increase the value added realized within the farm unit itself; it tends, that is, to defend and to increase farmers' incomes.

It also applies that this repertoire is the expression of peasant resistance. The six mechanisms are ever so many channels through which this resistance is articulated.

For agricultural producers diversification, the creation of a low external input agriculture, regrounding farming upon nature, engagement in pluriactivity and local cooperation and, finally, the creation of increases in technical efficiency are well understood mechanisms for emancipation; it are mechanisms to defend and improve their incomes. Actively spurring these mechanism aligns with their own interests. And the more they engage in these mechanisms (i.e. the more they deviate from the entrepreneurial trajectory that centres on scale enlargement, an increased use of external inputs, specialization instead of diversification and on a straightforward application of innovations elaborated in agro-industry and science instead of elaborating novelties), the more they act as peasants. Not as peasants

⁴ The technical efficiency is the relation between resources used and the production realized with these resources. The higher this technical efficiency, the more production is realized with one and the same set of resources. Through increases in technical efficiency the 'function of production' is moved to higher levels. In this way new 'frontier functions' are created.

from one or two centuries ago but as peasants of the third millennium. And in doing so, they shape a peasant-like agriculture; an agriculture that is, at the same time, an agro-ecological agriculture.

Some notes on the impact in Europe

Currently some 80% of European farmers are actively applying one or more of the indicated responses that together compose the European process of repeasantization. A general overview (based on a 1999 survey with n=3,264 in six European countries⁵) is entailed in Figure 4. It shows that among professional farmers⁶ more than half (51%) is actively practising activities that might be understood as diversification. Analytically, it refers to activities that augment the value added per unit of product. Typical expressions are organic farming, high quality production, the production of regional specialities, on-farm processing and direct marketing. It also refers to the inclusion of non-agricultural activities into the farm (thus equally raising the VA at farm level). Well known expressions are the (paid) management of nature, biodiversity and landscape; energy production; agro-tourism; provision of care and other services; and a wide range of more traditional rural services. Thus, more than half of the professional farmers are engaged (some from ancient times onwards, the most since recent times) in what has been discussed here before as the first mechanism (see again Figure 2).

Being engaged in new forms of cost reduction (through what I called here before the second and the third mechanism) that greatly contrast with cost reduction constructed through scale increase, composes a second important domain. 60% of all farmers is actively involved in this domain.

Finally, reference is to be made to pluriactivity. Once considered as an expression of a disappearing peasantry (if not right away as channel of depeasantization) it is again present as mechanism through which the 'peasants of the third millennium' are constituted: 27% of them are involved in it⁷.

There is considerable overlap between the domains distinguished in Figure 4 which strongly contributes to the creation of new heterogeneity. Within the newly emerging panorama, the farmers strictly following the entrepreneurial script (who are, according to the survey not involved in any of the three domains) are becoming a minority of 17%.

The ongoing search for and construction of additional value added is an important characteristic of the peasant economy. Through diversification a total extra net value added of 5.9 billion Euros is added to the agricultural sectors of the indicated 6 countries (1997 data)⁸. This is twice as much as the total agrarian income of Dutch agriculture. If the latter is defined as 'agricultural giant', one cannot but conclude that in the meantime another 'giant' has been born. Alongside the indicated impact of diversification, it has been calculated that the peasant type of cost reduction contributes another 5.7 billion Euros (for the 6 countries together) to the farm family income of the agricultural sectors of the 6 countries. That is another 'agricultural giant'. Finally there is a considerable contribution of pluriactivity: 20.4 billion Euros. Thus, a total additional income of 32 billion Euro is contributed to the farmer's family income of the 6 countries. This is to be compared to the 41 billion Euro rendered through strict agricultural production only. Hence 44% of the total farmer's family income is derived from diversification, new forms of cost reduction and pluriactivity. This illustrates the degree in which European agriculture is currently being made more peasant-like. It also shows that the continuation of agricultural production without being simultaneously engaged in some of the new defense mechanisms (summarized in Figure 2) would be very difficult if not right away impossible.



Figure 4: Engagement in forms of re-peasantization

Can an agro-ecological and peasant-like agriculture feed the world?

A main line of defence elaborated by institutions linked to industrialized farming is that the latter

⁵ Ireland, United Kingdom, the Netherlands, Germany, Spain and Italy.

⁶ The survey was limited to professional farmers only, i.e. those farmers obtaining at least 25% of their earnings from agricultural activities.

⁷ The reader is reminded that this refers to professional farmers only. When part-time farmers and hobby farmers are also taking into account (as is normally done in national and EU statistics) the percentage will be far higher (at the level of the 85% I referred to here before).

⁸ By now this will be far higher. There is, however, no statistical registration of the underlying flows nor an adequate registration of the implied activities. It is exactly the other way around: when the contribution of new activities to income goes beyond 50%, the concerned units are eliminated out of the agricultural statistics.

presents the only possible way for feeding the world in the year 2050 when the world population will be at its height. Agro-ecological farming and peasant agriculture alike are said, by the same institutions, to be incapable of feeding the world. I think it is important to fight this claim (precisely because it is the other way around: the main menace to food security is industrialized farming).

I will not present and discuss here the technical evidence on yields. This has been done convincingly in many other publications (among those the recent ISTAAD reports) and it will also be discussed in other articles in this volume. I will instead contribute here two additional pieces of evidence. The first regards peasant farming in the North of Italy as compared to a contrasting way of farming: the entrepreneurial way. It shows that, when all conditions are equal, peasant farming is far superior, especially when it comes to total production. The second example develops the argument further: it shows that diversified farming (remember that diversification is an important feature both in peasant farming and in agro-ecology) currently is (i.e. in the present crisis) a main foundation (and source) for further investments in food production as such.

Figure 5 is based on a comparative analysis of the dairy farms in the North of Italy. Departing from sociological research two groups were constructed. One within which the farmers clearly reasoned and operated according to an entrepreneurial logic, the other within which farmers' strategies clearly reflected a peasant rationality. Subsequently, the farm accountancy data of the farms of each group were analyzed and made comparable by translating them to an imaginary block of 1,000 hectares. This was done for 1971 and 1979. Later, in 2000, I revisited all of the involved and obtained the most recent farm accountancy data for the year 1999.

Thus, Figure 5 presents a synthesis of the differentiated development patterns of entrepreneurial and peasant agriculture, as they co-exist in one and the same homogenous region (i.c. the Province of Parma).

The inevitable question: can the peasantry feed the world? (Parma, Italy/ 'block' of 1000 has)

Parma province, Italy	Entrepreneurial farming	Peasant farming
GVP in 1971	735 million lire	844 (+15%)
GVP in 1979	2845	3872 (+36%)
GVP in 1999	8235	12,815 (+56%)

Figure 5: The inevitable question

A first important finding was that the peasant mode of farming generated more employment than the entrepreneurial mode – which in itself, of course, is not surprising at all. Secondly, as Figure 5 shows, the imaginary block of 1,000 hectares would produce considerably more when tilled in a peasant way as compared to the entrepreneurial way. The difference is even growing over the decades. In 1971, Gross Value of Production (GVP) realized through the peasant approach was 15% beyond the level realized through the entrepreneurial mode of production. In 1979, the difference was 36%, whilst in 1999 it amounted to 56% (this difference was partly due to the de-activation that began to express itself in the entrepreneurial group of farms). This clearly demonstrates that there definitely is no 'intrinsic backwardness' to peasant farming⁹.

Thirdly, the total amount of (gross) value added (GVA) realized is the highest in the case of peasant farming. This is not only due to the fact that total production is higher, but also because within the peasant mode of farming GVA represents a larger part of total GVP. In 1971, for instance GVA represented 65% of total GVP in the case of entrepreneurial farming, whilst in peasant farming this amounted to 76%.

In synthesis: if farming is structured according to the peasant mode of production not only more production and employment are generated; the peasant mode also generates more income. This applies to the agricultural sector as a whole- it equally applies to per capita income levels (at least in this case).

In 1971 income levels per unit of labour force were equal to 2.5 million Italian lire (Lit) in the group of entrepreneurs, whilst they amounted to 3.8 million in the peasant group. In 1979 the income levels per unit of labour were 15 million respectively 18 million in current Lit. And in 1999 an income level of 62 million lire was realized through the entrepreneurial way of organizing production, whilst it was 85 million in the peasant case.

Hence, the development of peasant farming (or more specifically: labour driven intensification) is not per definition identical to the often assumed 'distribution of poverty'. It is not necessarily resulting in 'involution'. Within the mathematical models of neo-classical economists intensification might run counter to assumed 'diminishing returns'- in real life peasants are patterning development (as 'organized flow of activities through time') in such a way that incomes remain at acceptable levels or are even being augmented.

I am well aware of the fact that there are many instances

⁹ At the same time it applies, again, that this is an evident outcome. Putting in more people into the process of production, especially when the latter is structured as peasant production, will result in higher levels of production. That is the case in Latin America; it is equally valid in Europe. It is just the old fashioned peasant way of production and development – the only special thing here, one could argue, is that this "still" holds true in parts of European agriculture. The real relevance of the data comes to the fore when levels of value added are taken into account and related to the used labour force.

in time and space that entail differently structured patterns. As a matter of fact, there are many places where ongoing intensification is being blocked and where, consequently, 'diminishing returns' are emerging. There equally are instances where poverty is socially distributed. The point, though, is that such phenomena are not *intrinsic* to peasant farming – they are, time and again, induced into it by, and through, the interaction with wider society. Depending on such relations peasant constellations might seemingly die in ugliness or show considerable superiority. However, when conditions are favourable, peasant farming is definitely more productive than other, more large-scale or more industrialized ways of farming (as was demonstrated, in the 1960s, for Latin America in the then well know CIDA studies).

Finally I want to refer to recent Italian research that focused on the changing balance between specialized farming and diversified agriculture. This research included a survey (n=1,600) among large and full time farmers receiving more than 15,000 Euros per year for direct income support (hence, several aspects of this survey differ from the surveys that are summarized in Figure 4 here before). Figure 6 contains a summary of some central data. To begin with, in 2008 (the year in which the survey was applied) 27% of the farms of this particular subgroup could be classified (according to the farmers themselves) as diversified (or 'multifunctional') farms that had adopted new activities alongside 'traditional' farming activities. The remaining 73% of the farms were specialized on agricultural activities only. Eight per cent of this latter group expected that the farm would be closed in the five years to come. In the multifunctional group this was only 1%. Thirteen per cent of the specialized farmers planned to diversify as well within the next five years. Together these changes would imply that over the coming 5 years the distribution between specialized and multifunctional farms will change to 57% specialized and 43% multifunctional. When farmers younger than 40 years are considered the distribution shifts to 49 and 51% respectively.



Figure 6: Dynamics in Italian agriculture

The same research also probed into investment patterns. Of the specialized farmers 16% indicated that they had actively invested in food production during the last five years, less than half the number of multifunctional farmers who had done so (36%). And in the coming five years 27% of the specialized farmers said that they would invest in food production; while 44% of the multifunctional farmers had plans to invest in food production.

This indicates that diversified (or multifunctional) farming definitely does not represent an adieu to farming as such. It is rather the other way around. Multifunctionality has always been an important feature of peasant agriculture and now it is re-emerging thus making farming more peasant-like. The important point is that this turn towards a more peasant-like agriculturestrongly supports food production. The earnings obtained from new activities help farmers to continue with, and to invest in, the classical agricultural activities. This is especially important in the current epoch in which agriculture is facing the consequences of the general economic crisis. Whilst specialized, entrepreneurial farms start to de-activate production, peasantlike farmers use diversification (and other mechanisms summarized in Figure 2 here before) to strengthen food production.

In stead of references

Several of the arguments presented in this article are further illustrated and discussed in a book that I published in 2008. It s entitled "The New Peasantries: struggles for sustainability and autonomy in an era of empire and globalization". It was published by Earthscan in London. It was translated in Portuguese language and published by the ÜFRGS Editora of the Federal University of Rio Grande do Sul in Porto Alegre in Brazil as "Camponeses ae Impérios Alimentares: lutas por autonomia e sustentabilidade na era da globalização" (2008). The Spanish language version was published (in 2010) by Icaria Editorial in Barcelona as "Nuevos Canmpesinos: campesinos e imperios alimentarios". There is also an Italian edition published in 2009 by Donzelli Editore in Rome under the title:"I nuovi contadini: le campagne e le risposte alla globalizzazione". Currently, a translation in Chinese language is being prepared.

There is a short, theoretical synthesis in The Journal of Peasant Studies, 2010, Vol 37, no 1, pp 1-30 under the title "The Peasantries of the Twenty-First Century: the Commoditisation Debat revisited." The specific impact of the current crisis on agriculture is discussed in "The Food Crisis, Industrialized Farming and the Imperial Regime," published in the Journal of Agrarian Change, 2010 10 (1): 98-106.