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Unfair agricultural prices cause hunger and resources dilapidation

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Abstract/Resumo:

The main objective of this paper is to present facts and arguments trying to prove that unfair prices are the most important cause for the dilapidation of human and natural resources. In many poor countries farmers sell their products at prices below their real cost. In these countries, most often, family labour and equipment depreciation are not accounted as real costs. Although the huge technical progress occurred in the last fifty years, or because of it, many thousands of farmers in undeveloped countries went bankruptcy and many millions of people are starving.

The expected increase in world population will demand for levels of production much higher than those that are been produced. So, if we want to feed the world in a sustainable way, maintaining the production potential of human and natural resources, a new set of trade and rural development policies have to be implemented across the world, based on regional common markets. To promote these policies, regional organizations (that include several countries) and a new international trade organization must be created.

Palavras-chave/Keyword: fair prices, trade policies, resources dilapidation, regional common markets, family farms, agricultural subsidies.

Classificação JEL/JEL Classification: F02, F13, O13, O33, Q13, Q17

Unfair agricultural prices cause hunger and resources dilapidation.

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Abstract

The main objective of this paper is to present facts and arguments trying to prove that unfair prices are the most important cause for the dilapidation of human and natural resources. In many poor countries farmers sell their products at prices below their real cost. In these countries, most often, family labour and equipment depreciation are not accounted as real costs. Although the huge technical progress occurred in the last fifty years, or because of it, many thousands of farmers in undeveloped countries went bankruptcy and many millions of people are starving.

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1. Introduction

Mass labour migration from rural areas to urban areas and from poor countries to rich countries has been one of the most dramatic changes in several regions of the world. About this subject one can raise many questions such as:

- Why do farmers migrate to cities?
- What are the characteristics of the farmers that migrate?
- Why workers from non-agricultural industries have higher average income then rural workers?
- Is it fair to pay ten, twenty, or more times for a "kilogram of automobile" then for a kilogram of wheat or beef?
- Does market price reflects consumer's preferences or are they the result of uneven forces?

Any student of economics, almost from the first day of classes, learns that the best way for an enterprise to become competitive is through cost reduction. In reality, the first goal of most of the research is to find out ways to produce the same amount of output using fewer inputs, or, which is the same, with the same amount of inputs to produce more and/or better output.

There is no doubt that during the last century there has been a huge technical progress in almost all fields, being the green revolution a symbol of this. In general, technical progress has been capital intensive, that is, the research has found the way to use capital to substitute (replace) labour and/or land.

Following the line of technical progress, based on cost reduction, one can think of two different ways to achieve it. One is, as it was said, through a more efficient use of the inputs, producing more with the same amount of inputs. The other is by reducing the amount of inputs used: fewer rations per kilogramme of meat produced, less fertilizer or less water per unit of product, and so forth. In the limit, one can think that the amount of inputs used to produce a given quantity of output tends towards zero! This, however, is impossible because nature imposes its limits. This line of thought and action has been useful helping human kind to fulfil their desires but, in many regions of the world, it has had several dangerous impacts, namely in the dilapidation of physical and human resources.

Currently, institutions like the World Trade Organization (WTO) and the World Bank play a crucial role trying to establish some rules for the global economy. In these organizations, small farmers are usually left out of the bargaining process so, their peculiarities for maintaining their traditional way of life are not considered. In many regions, family farmers, only can survive if they can sell their products, but most often the terms of trade are not fair; they sell their products at very low prices and buy the goods they need at very high prices. So, they end up going bankruptcy and being excluded of the producer's society.
Many developing countries rely on exports of a small number of agricultural commodities, for a large share of their export revenues. This concentration leaves them exposed to unfavourable market or climate conditions. As much as 43 developing countries depend on a single commodity for more than 20 percent of their total revenues from merchandise exports (FAO, 2005). Most of these countries depend on agricultural exports to finance food imports, so a decline in the prices of exports relative to the prices of imports can threaten food security. These problems are exacerbated by market distortions, arising from tariffs and subsidies in developed countries and market power in some commodities supply chains of large transactional corporations (FAO, 2005).
The consequences of all of these are the overuse of the resources, in order to survive, causing the exhaustion of human and physical resources.

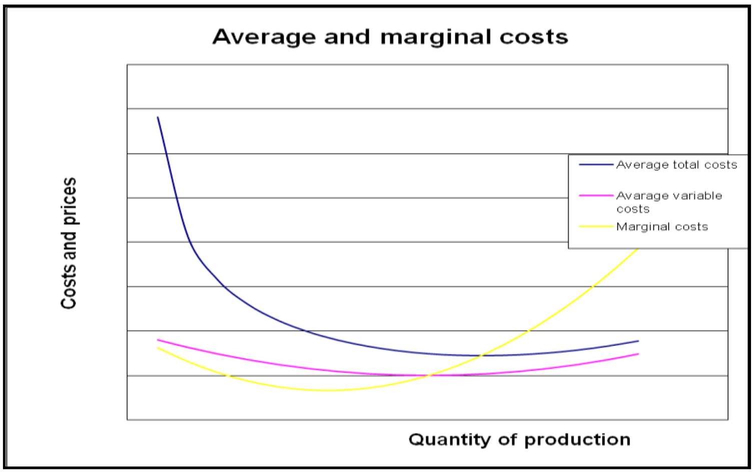
2. Dilapidation of physical resources

The decline of production costs, through technological progress, mainly occurs in the most developed countries or regions and leads to product price decline, at the farm gate, which have the consequences of putting some entrepreneurs out of business or continuing their activities but receiving a price that is not sufficient to pay for the total production costs. In this situation, most often, farmer do not take in account the real value of the labour they spent in those production activities or valuate it at the opportunity cost that, in general, is much less then in the labour market. In other situations farmers do not account for depreciation costs of their plants, or do not take into account soil erosion or water and soil pollution (do not internalize the externalities of the production process). So, very often the resources are over-exploited and exhausted and the economy of their countries never reaches the first-best solution. It is known that natural resources can become a significant obstacle to the long-run growth (Gylfason, 2001).

The necessity to survive leads to the exploitation of natural renewable resources above the optimal harvesting rate that allows for sustainable long-run optimal growth, which is upper-bounded by biological rate of reproduction. This means that the production systems are not sustainable.

Across the world there are many examples of situations like this. For instance, in the south of Brazil (Rio Grande do Sul, Santa Catarina, and Parana states), one only can explain why most of the farmers continue to raise chicken and pigs assuming that farmers do not account for the labour cots and/or animal-yards depreciation (Talamini et al, 2005).

As it is known, if the price is lower then average total cost there is a loss, that is, at least one of the production factors is not receiving the full amount it deserves at actual market prices. In the figure below if price falls below minimum average total costs (ATC), there is a loss, which means that one or more of the production factors are not getting the return they deserve. If the market price lies between the minimum value of ATC and the minimum value of average variable cost (AVC) entrepreneur can pay all the variable costs, but only part of its fixed costs. This means that the long run net income of entrepreneur is negative. This happens to thousand of family famers living in undeveloped and developing countries. In Brazil , for instance, almost 50% of family farms, across the country, have long run negative income (Eliseu et al., 2001).



In those situations, family labour or fix capital or both are the factors that usually do not receive the return they are supposed to. So, when the capital utile life ends up, most of the times, farmers do not have money enough to replace it and they go to the commercial banks asking for loans. The situation, in general, gets even worse when the income received from the production is not enough to pay for bank interest rates, for inputs bought outside the farm and to feed the family (Filho et al. 2001). In this situations farmers get out of the job – they sell what they still possess and go to the villages looking for jobs.

Before taking the decision of abandoning agricultural activities, farmers exhaust themselves and their resources! To survive, most of the time, they do not use the appropriated technologies or the best crops for the soils they have. They use the technologies they know or have the capacity to use and produce the crops they need to survive and that they believe they can sell.

The world is full of examples where there has been huge technological progress and, at the same time, many farmers, namely family farmers, are excluded from the production chain (Pinheiro, 2000). For instance, in the State of Santa Catarina, in the south of Brazil, there are thousands of hectares of mountain lands that some twenty years ago were used to grow corn to feed pigs and poultry and, presently, those mountains are just covered of rocks due to soil erosion! Farmers grew corn, in those circumstances, because they could not find any other activity more profitable, in a short run point of view. The best use of those soils, for sustainable production, would be forest or pasture to feed cattle, but the price of those products was so low that farmers would not get money enough to fulfil they needs. So, chicken and pig production led to resources exhaustion.

Probably the single most important reason to explain situations similar to the one we just describe, is unfair international competition, sometimes through artificial low prices. This situation has worsened with the degree of industrialization of agriculture, that is, from the situation when agriculture was a way of life to farming as a commercial business controlled by a set of huge multinational enterprises.

3. “Dilapidation” of human resources

As a consequence of the dilapidation of physical natural resources, most of the times farmers are forced to abandon agriculture, because soil is not productive anymore, so they move to the villages looking for jobs that most of the times they can not find. Usually ex-farmers end up spending the money they had from selling they farms and as they not find jobs they go to live in slams.

There are many reasons one could think of to explain why sub-Saharan population try to cross the ocean to find jobs in Europe. Certainly, an important one is because they exhausted the natural resources and now they are trying to survey at any cost even putting in danger their one lives.

The relation between off-farm migration and rural poverty was never made completely clear (Bryant et all, 1981). In the last century, off-farm migration was seen as the main device by which income of those remaining in agriculture could be raised.

In most of the cases off-farm migration can be seen as an away of exchanging rural poverty for non farm and urban poverty rather than a way to reduce it.

Labour is often the only asset of poor people. If it is not fully utilized and adequately remunerated it is impossible to survive. Unfortunately, in most developing countries, due to the low prices of farm products, labour, the vital asset of most of the people, is underutilized and undervalued. The International Labour Organization (ILO), reported that, despite strong economic growth in 2005, global unemployment reached an historic high, with 191.8 million people without work. In addition, many more are underemployed or in exploitative jobs, with earnings below subsistence level. This situation tends to get unsupportable with present economic/financial crises; even in countries that thought to reach a level of development that situation of this kind could not happen!

Dealing with the theme of employment, it is important that adequate consideration be given to agriculture and off-farm rural employment, in light of the fact that three-quarters of those living on a less than a dollar a day live in rural areas and depend on agriculture for their livelihoods. In fact, the word’s 450 million agricultural workers comprise 40 percent of the global labour force and in the poorest countries – especially those in sub-Saharan Africa – up to 80 percent of the population derive their livelihood from agriculture (Bäge, 2006).

Agricultural labours are typically among the poorest workers. They are the most vulnerable, seldom receiving the legal and regulatory protection enjoyed by more organized labour in urban areas. The result too often is lower than minimum wages, long working hours and other forms of exploitation, and lack of recourse to enforceable labour rights (Bäge, 2006).

All over the world there is evidence that agricultural sector growth has a greater impact on poverty reducing than growth in other sectors. In fact, the ILO's World Employment Report for 2004-05 concluded that, "if there is a specific type of sectorial growth that will best directly assist in the achievement of the Millennium Development goals on poverty reduction, it is through agricultural sector.

4. Market price and the value of goods and services

Since the Great Depression that American farmers receive compensatory payments to make up the difference between farmers market price and some price level prevailing in predepression years. Johnson (1977) wrote: "For the last four decades the United States as followed an ambiguous and inconsistent set of policies for trade in farm products. At no time were the conflicts between a liberal trade policy that would guide farm production in the directions implied by comparative advantages and the needs of domestic farm programs that required substantial interferences with international trade, for both imports and exports resolved".

The United States (USA) is not the only country that has difficulties of solving such conflicts. Several individual countries, as well as European Union (EU) have struggled with the seemingly inconsistent objectives of expanding international trade while vigorously protecting domestic agricultural productions.

Despite the shrinking size of the farm sector in the most developed countries, agricultural interest groups have effectively managed their campaigns contributions and influences to give them political power far in excess of their

numbers. So, in countries like USA, EU and Japan obtain large transfers from taxpayers and consumers to agricultural producer.
Table 1 illustrates the level of subsidies given to USA and EU farmers for some agricultural products.

Table 1: Producer Subvention Equivalent (PSE) for some agricultural products in USA and EU (Average 1998-2000)

Product	Producer Subvention Equivalent (PSE) – US$/ton	
	USA	European Union
Corn	34,10	64,10
Wheat	80,80	97,20
Sugar	172,80	173,40
Oil seeds	46,00	135,60
Pork meat	42,6	289,00
Poultry	44,5	318,30
Beef	99,8	2805,00
Milk	182,6	147,50

Source: Debar, 2002

Even, the so called “green box” subsidies that are not targeted at particular products, and include direct income supports for farmers that are not related to current production levers of prices, have and harmful and pernicious effect. In one way or another, the subsidies increase farmer’ revenues; so the farmers who receive them are in better conditions of those who did not receive them. Developing countries need to worry about “green box” subsidies because it actually operates like “income insurance” scheme for the farmers in industrialized countries (Sharma, 2004).
There are many reasons to explain why farmers in many regions of the world have been and will continue to be poor, but unfair prices (artificial low prices through subsidies) for farm products, at the farm gate, is one of the most important. Low prices lead: to low revenues, low salaries, illiteracy, low mobility of labour, and so on. To obtain better prices, underdeveloped countries

need to improve governance of supply chains so that producers can capture the benefits of the added value of their products.

But, what is fair trade? Fair trade involves the following principles[2]:

- Producers (workers) receive a fair price – a living wage. For commodities, farmers received a stable, minimum price.
- Buyers and producers trade under direct long-term relationships.
- Producers have access to financial and technical assistance.
- Sustainable production techniques are encouraged.
- Working conditions are healthy and safe.
- Forced labour and exploitive child labour are not used.
- Equal employment opportunities are provided

Fair trade is based on fair value, also called fair price, defined as a rational and unbiased estimate of the potential market price of a good or service, taking into account such factors as: relative scarcity; perceived utility; replacement costs or costs of close substitutes; production/distribution cost.

Is the market price a fair value? There are two schools of thought about the relation between the market price and fair value in any kind of market. The efficient market hypothesis asserts that, in a well organized, reasonably transparent market, the market price is generally equal to or close to the fair value. Behavioural finance asserts that the market price often diverges from fair value because of various common cognitive biases among buyers or sellers.

It is well known that, nowadays, agricultural product prices do not represent their fair value, because perfect competition assumptions do not hold in most of these markets. On the one hand, producers are not all small. Some of them, especially from reach countries, are big and have the capacity to influence the market price. On the other hand, some buyers, namely multinational corporations, importers from undeveloped countries, have much higher bargaining power than the producers of these countries. Finally, and probably the most important reason, farmers from reach countries have much more

[2] **Fair Trade: http:www.globalexchange.or/campaigns/fairtrade/**

information, access to new technologies, and, above all, as we saw before, many subsidies for production and exportation.

The effects of subsidies are adverse because they decrease world market prices and, consequently, derive down incomes of poor farmers in developing countries. The World Bank estimated the world market price depressing effect of high income countries' agricultural subsidies and protectionism. The estimations of World Bank indicate that OECD policies had depressed the world market price between 10 and 50 percent below the level at which it would otherwise be (World Bank, 2002). The estimates for several products are presented on Table 2.

Table 2: World market prices depressed below long run trend

Rice	33-50%
Sugar	20-40%
Dairy products	20-40%
Cotton	10-20%
Peanuts	10-20%

Source: World Bank. Global Economics Prospects 2002

Even the food aid policy of USA, despite its goodness of supporting the development and humanitarian activities of many countries, displace commercial sales from local farmers, decreasing agricultural prices and, consequently, farmer's incomes.

High income countries tend to be more protectionists in the products where low income countries have a comparable advantage.

Price distortion has been the main reason for the dilapidation of human and physical resources all over the world, manly in those countries which the economies relay heavily on agricultural production.

Although we are always told that the market is the best mechanism to efficiency, the market, in reality is meant only for the developing county farmers. For the farmers in the developed countries, the government provide the welfare check (Sharma, 2004). For an Indian rice farmer, for instance, it doesn't matter what the prevailing international price is. He doesn't know what constitute competitiveness in a globalised world. But what is shocking is that despite having one of the lowest cost of production of rice in the world, the Indian government refuses to him an assured price on the plea that the “minimum procurement price” that is supposed to get has actually become a “ maximum support price” since rice is available at a much power price in the international market (Sharma, 2004).

So, although, very often it is suggested that fair value is: “the price at which an asset (commodity) or liability could be exchange in a current transaction between knowledgeable, unrelated willing parties”, in agriculture quoted prices, most of the times, do not represent the best estimate of the fair value.

5. Suggestions to minimize market distortions

To allow farmers across the world to build up sustainable production systems, that can generate the maximum amount of food without natural degradation, it is absolutely necessary to guarantee stable prices at a level high enough that give small and medium size farmers income to live with dignity from their work. To rich this desideratum it is crucial to create an international trade organization much more efficient, fair, equitable, and powerful than the existing one. The WTO has not the power to force any country change its policies!

The new organization must be founded under the following principles (Pinheiro and Coelho, 2008):

- Establishing large regional common markets, through the regrouping of countries with similar levels of labour productivity (for instance, regional markets like West Africa, West Europe, North Africa and Meddle East, north America, and so on);
- Protecting those regional common markets against importations, at low prices, from regions with excess of agricultural products, in order to guarantee to small poor farmers of unfavourable regions, prices stable and high to generate income enough that allow them to live with dignity and expand their activities;
- Negotiating, product by product, international agreements in order to fix, in a fair and equitable away, average trading prices, as well as the

exporting prices and quantities to each one of the large regional markets referred above.

Even so, certainly, it will be necessary to continue implementing food help policies, but instead of basing these policies on the grounds of cheap food, that lead farms to misery and reduce domestic markets, it will be better increasing the purchasing power of the poor consumers to increase domestic demand. In this way, food helping policies could take the form of food stamps, financed by governments or international organizations, given to the poor people but only exchangeable by food (similar to what is done in USA).

However, to raise agricultural prices it will not be sufficient to promote a balanced agricultural and rural development and increase global production up to the desired level. Certainly, these type of policies need to be complemented with national and regional (including several countries) development policies such as: land ownership, land use and distribution, policies for credit access for investments and production inputs, public investments in infrastructures (irrigation, drainage, rural roads, storage facilities, and so on), fiscal policies differentiating positively farming activities, services of research and rural extension.

We should not forget that agricultural development is crucial for hunger eradication and to increase well-faire of the population of the least developed and developing countries.

References

Alves, Eliseu, Mauro Lopes e Elisio Contini (2001), " O empobrecimento da agricultura brazileira", Revista de Política Agrícola, Ano X, n.º4, Jan./Mar., 5-19.

Bäge, Lennart (2006), "2006 Substantive Session of ECOSOC", http://www.ifad.org/events/ecosoc/index.htm.

Bryant, W. Keith, D. L. Bawden and W. E. Saupe (1981), " The Economics of Rural Poverty – A Review of the Post-World War II, United States and Canadian Literature", in A Survey of Agricultural Economics Literature, Vol. 3, Edited by Lee Martin , University of Minnesota.

DEBAR, Jean-Christophe, Les politiques de soutien à l'agriculture em Europe et aux États-Unisvues à travers lês chiffres. In Europe /États-Unis : Regards croisés sur les politiques agricoles.Colloque de la Societé Française d'Economie Rurale - SFER, oct 2002. Paris.France.

FAO(2005):http://www.fao.org/newsroom/en/news/2005/89721/index.html

Filho, J., Duarte Talamini, Joel Boff, e António Pinheiro (2001). Revista de Política Agrícola, Ano X, n.º1, 13-18.

Johnson, D. Gale (1977), "Postwar Policies Relating to Trade in Agricultural Products", in A Survey of Agricultural Economics Literature, Vol.1, Edited by Lee Martin, University of Minnesota.

Pinheiro, António C. e José Castro Coelho (2008) "O preço dos alimentos e os reflexos na agricultura", Cadernos de Economia, n.º 85, Ano XXII, Out/Dez. 2008, p.p.103 -113.

Pinheiro, António C. (2000). " Progresso Tecnológico e exclusão social: o caso da suinicultura e avicultura no sul do Brasil", in Homenagem ao Professor Augusto da Silva, Universidade de Évora, Portugal.

Sharma, D. (2004): http://www.mindfully.org/WTO/2004/Green-Box-Subsidies21apr04.htm

Talamini, Dirceu., Francisco Martins, e António C. Pinheiro (2005) " Rentabilidade da terminação de suínos no Estado de Santa Catarina, Comunicado Técnico n.º 404, Embrapa Suínos e Aves, Concórdia – SC.

World Bank. Global Economic Perspectives and the Developing Countries 2002. Washington, DC, September 2002

http://www.globalexchange.org

Fair Trade: http://www.globalexchange.org/campaigns/fairtrade/