Fair Prices: Prices based on Human Rights

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About the author

Ruud Bronkhorst (1948) is a retired development economist who worked as staff member and as a consultant with several national and international organizations, such as FAO, WFP, Ministry of Foreign Affairs of the Netherlands, and several NGOs.

In 2008 he joined InfoBridge Foundation and worked on food security, rural development, living income and Fair Prices.

He wrote a large number of articles and papers on Food aid and on Fair Prices. In 2020 his book on Fair Prices was published 'The Economics of Human Rights: Using the Living Income / Fair Price Approach to Combat Poverty', followed in 2022 by a book chapter '**Fair-trade coffee: how fair is fair?** in ***'Climate-smart production of coffee - Improving social and environmental sustainability'***.

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Cover photo: *Courtyard with grain storage in Niger (Photo by author)*

Abstract

In this paper reasons are given why Fair Prices are essential to obtain a Living Income for small producers and a Living Wage for workers. I will argue that there is a moral obligation to pay Fair Prices, both for companies and governments. This obligation is based on the Universal Declaration of Human Rights, adopted by the United Nations in 1948 and on the worldwide challenge of Climate Change. The concepts Living Wage and Living Income can be instrumental in meeting this obligation. That helps to answer the question how we can assure workers of a sufficient income.

Prices, and especially prices of international traded products like coffee, tea, cocoa etc., are distorted because they are more based on power relations than on the equilibrium between supply and demand between equal partners. Therefore, a paradigm change is necessary, from market prices to prices based on human rights.

In the case of small farmers there is another factor that is also important: climate change. A Living Income for farmers sufficient to live decently, should be supplemented by an additional percentage to enable them to invest to prepare for climate change.

Fair Prices are important for producers:

- to earn a Living Income,
- to enable them to pay their workers a Living Wage,
- to invest for the maintenance of the enterprise, and
- to enable them to prepare for and adapt to climate change.

Several effects of the implementation of Fair Prices on workers, producers, child labour, environment, and the local economy are discussed. The Living Income / Fair Price approach is explained, and advantages and disadvantages of other Living Income Reference Price Models are discussed.

Keywords

Human Rights, Ethics, Prices, Fair Price, Living Income, Climate Change, Living Income Reference Price, Marginal producers, Economics, Sociology, Policy

1. Introduction

Many small producers and their workers do not earn enough for a decent life for themselves and their family.

The reason for that is situated in the way our society is organised, where prices are determined without regard for the needs of producers and workers. Theoretically, prices are determined on markets by supply and demand. In an ideal situation this leads to an equilibrium price that is optimal. In reality, prices are not set that way. To do justice to all, determination of prices should be based on ethics. This makes a paradigm change necessary from a theoretical economic approach that does not take into account power positions, to an approach based on ethics and human rights leading to 'Fair' prices.

Subjects that are discussed in this paper are the underlying reasons to the need for Fair Prices to obtain a Living Income, especially Human Rights and the problem of Climate Change. A proposed definition of Fair Prices is followed by an analysis of the actual situation concerning world market prices. Then the main differences between market prices and Fair Prices are stipulated, followed by an analysis what consequences the payment of Fair Prices can have on workers, producers, child labour, the environment and on the local economy.
Different approaches to calculate Fair Prices and Living Income Reference Prices are discussed, followed by some conclusions about Fair Prices.

2. Methodology

First the connection between Human Rights, Living Income and Fair Prices is explored. This is done by taking the 1948 'Universal Declaration of Human Rights' adopted by the United Nations (UN), as point of depart. Then we look at definitions of Living Income (LI) and Fair Prices (FP).

The actual situation concerning the determination of prices is critically looked at and examined is what this means for marginal producers. The result of this examination is compared with the human rights of producers. The result of this examination leads to the conclusion that prices and human rights are different worlds. This leads to an exploration how prices and human rights can become more balanced.

The connection between income and the challenge of climate change is looked at as well. Here possibilities to enable small producers to cope with climate change are analysed.
A further problem that is touched upon is the question what the consequences would be when the pricing system is changed. Here a theoretical approach is chosen; what would happen to a country and its population when this would be the case.

Another question to be answered is the way how to change to a different system. Compared are the main approaches that all aim at a paradigm change, namely the 'Fair Price' approach and different 'Living Income Reference Price' models.

3. Connection between Human Rights, Living Income and Fair Prices

Universal Declaration of Human Rights

In 1948 the 'Universal Declaration of Human Rights' (UDHR) was adopted by the United Nations.

Article 23 of the 'Universal Declaration of Human Rights' states:
"Everyone who works has the right to just and favourable remuneration ensuring for himself and his family an existence worthy of human dignity, and supplemented, if necessary, by other means of social protection."

and Article 25,
"Everyone has the right to a standard of living adequate for the health and well-being of himself and of his family, including food, clothing, housing and medical care and necessary social services, and the right to security in the event of unemployment, sickness, disability, widowhood, old age or other lack of livelihood in circumstances beyond his control." (UN Human Rights)

The 1948 Declaration set out fundamental human rights to be universally protected. The Universal Declaration is not a treaty, so it does not directly create legal obligations for States. It is an expression of the fundamental values which are shared by all members of the international community and therefore of great moral value.

In December 1966, the UN General Assembly adopted two international treaties that would further shape international human rights: 'the International Covenant on Economic Social and Cultural Rights' (ICESCR), and the International Covenant on Civil and Political Rights' (ICCPR). These are often referred to as "the International Covenants."

Together, the UDHR and these two Covenants are known as the **International Bill of Human Rights**.
ICCPR states among others:

- Right to an adequate standard of living
- Freedom from hunger
- Right to health
- Right to education.

The importance of the **International Bill of Human Rights** is great and is at the basis of the SDGs, the Sustainable Development Goals, adopted in 2015 by the United Nations. Goals 1 'No Poverty' and 2 'Zero Hunger' are about ending poverty and hunger, and achieving food security (UN SDG's).

Volanta handpump Niger (photo by author)

In ICESCR the right to food is guaranteed as a legally binding right It is realized when everyone always has physical and economic access to adequate food or means for its procurement, as established in General Comment 12, Committee on Economic, Social and Cultural Rights (CESCR).
Translation of the right to just and favourable remuneration in Article 23 of the 'Universal Declaration of Human Rights, the right to food (CESCR), and the right to an adequate standard of living (article 25 and ICCPR) has led to the concept 'Living Wage' (LW).

The most common accepted definition of a Living Wage is:
"The remuneration received for a standard work week by a worker in a particular place sufficient to afford a decent standard of living for the worker and her or his family. Elements of a decent standard of living include food, water, housing, education, health care, transport,

clothing, and other essential needs including provision for unexpected events." (Global Living Wage Coalition).

The concept of a living wage applies to paid workers only. For agriculturalists who work on their own account, earning a living by selling their produce on the open market or to customers such as large companies, another concept is needed. This new concept is 'Living Income' (LI). A Definition of Living Income by the Living Income Community of Practice (an alliance of organisations including Fairtrade International and Rainforest Alliance) is:

"A Living Income is the net annual income required for a household in a particular place to afford a decent standard of living for all members of that household" [1]
whereby:

- Net income = Total income minus all costs
- Household is a group of people (often family) who form an economic unit (pooling income and other livelihood assets), often (but not always) living under the same roof or within the same compound.

When talking of Fair Prices, we must distinguish between fair producer prices and fair consumer prices. A Fair Price to the producer basically means that he/she is not paid too little, while a Fair Price to the consumer means that he/she is not paying too much for an acceptable product. The consumer's willingness to pay can be constrained by lack of monetary means. A fair consumer price implies the absence of excess profits in the chain, due to monopolies, oligopolies, and other factors. A Fair Price to the consumer does not imply that the lowest amount possible is paid but that not too much or too little is paid. This means that a Fair Price to the consumer implies a Fair Price to the producer.

For an overview of how economists have dealt in time with the concept 'fair', I refer to my earlier work (Bronkhorst 2019).

Here the following definition of a 'Fair Price' is proposed:
*A **'fair' price** is the minimum price the producer should receive to cover all production costs (fixed and variable costs) and be able to pay Fair Wages to all his/her workers on this product and him/herself. It should also allow the producer to make necessary investments. In the case of agricultural activities, it should provide at least a 'Living Income' for the farmer (Bronkhorst 2020).*
A 'Fair Price' must include the payment of 'living wages[2]': wages sufficient to enable a worker to have a decent life for him/herself and for his/her family. This includes food, shelter,

[1] https://www.living-income.com/
[2] Fair wages include more than living wages alone. According to Vaughan-Whitehead Fair wages refer to 'company practices that lead to sustainable wage developments'.

education, health care etc. To make payment of living wages possible, the employer must receive Fair Prices.

Payment is on condition that a complete working week is spent on work on the specific product. Besides the fact that full employment on the product is required, the product should also be considered useful. A common way to determine the usefulness of a product is through the demand for it[3]. Beside coverage of production costs, a reasonable profit must be part of the Fair Price. A reasonable profit is a profit that permits the firm to continue its operations and make the necessary investments to be able to continue in the future as well. This includes investments needed to prepare for climate change impacts.

Theoretically prices are based on demand and supply (Figure 1).

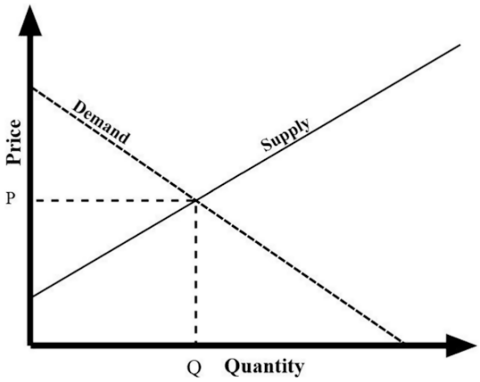


Figure 1. Equilibrium price P at quantity Q in a situation of perfect market conditions

Where these two are in equilibrium, market prices are set. However, prices, and esp. international prices, are based more on power relations than on the equilibrium between supply and demand between equal partners. Think of the powerful position of firms in cases of monopolies, oligopolies etc. Unequal relationships do not occur at international level only, but on national and local level as well. Think of local traders that advance money to farmers in need and then can collect the produce at too low a price because the farmer is dependant om the trader. Therefore, we cannot consider actual market prices, to be optimal prices.

Since this price model clearly does not suffice to assure an adequate standard of living for the workers, we need a paradigm change to arrive both at optimal prices and do credit to Human Rights.

The Universal Declaration of Human Rights leads us to a change from prices and wages based on power relations and distorted market prices, to human rights as the basis for international wages and prices.

[3] Usefulness cannot be measured by demand alone though. There are many products that are in high demand (such as certain drugs) but that are harmful both to the user as well as to the general health system. Besides demand implies only demand by people with sufficient purchasing power. The demand of the poorest is not taken into account.

4. Climate Change

Additional to Basic Human Rights we must include the effects of Climate Change in our analysis. It is well-known that poor farmers in Africa, Asia and Latin-America are not a cause of climate change. Yet they suffer most from the consequences of climate change. To be able to continue to live of their production can be called a Human Right as well. So, this aspect should also be considered in our analysis. To achieve this Basic Human Right as well, the Living Income a farmer should earn should be supplemented with an additional percentage to enable the farmer to invest to prepare for climate change. Farmers must adapt to rapidly changing climatic conditions. For smallholder farmers, this is difficult. They already can barely survive and have no financial resources to purchase new tools or seeds to invest in a more diverse production. The World Bank states that climate change hits the poorest people the hardest (World Bank). As the effects of climate change worsen, escaping poverty becomes more difficult. Because of climate change, to adapt, farmers must invest even more than they used to do. Therefore, the definition of living Income used below when discussing the Living Income/Fair Price methodology is an extension of this definition. The extension implies adding to the calculation a percentage to enable additional investments to improve future yields (Bronkhorst 2020). This percentage depends on local circumstances. The reason for adding this percentage is that farmers in particular, need more income to prepare for and adapt to challenges such as climate change and soil exhaustion. Extra funds may be essential to help them to prepare for the future and ensure sustainable production over the long term.

This implies that Fair Prices are important for producers:

- to earn a Living Income,
- to enable them to pay their workers a Living Wage,
- to invest for the maintenance of the enterprise, and
- to enable them to prepare for and adapt to climate change.

5. Effects of the payment of Fair Prices

5.1 Effects on workers

In general, the payment of Fair Prices will lead to more income, and therefore a better food security situation of the workers. We will analyse the different effects on producers, labourers, consumers, the local economy, the environment, and government finances.

5.2 Effects on Producers

More income, to the level of a Living Income for the farmer will, besides improved living conditions for the farmer and his/her family, give the farmer more financial possibilities to invest in better production techniques and environment friendly ways of production. Of course, not all additional income will be used to this end, but the possibility to do so is there for all. It can be compared to additional money for schooling for children; the fact that the possibility to send children to school instead of using them as cheap labour exists, is no guarantee that the possibility is made use of. Fortunately, a large part of the population seizes the chance. For small farmers more income implies a better food security situation. Besides producers can pay higher wages to the workers, made possible by the higher price received.

5.3 Effects on Labourers

5.3.1 General

Higher wages, at least up to a living wage, means for the labourers as well a better food security situation. It should be kept in mind however, that the payment of Fair Prices to the employer does not necessarily imply payment of living wages to the workers. To achieve that, is a responsibility of producers, trade unions, governments, and buyers together. Trade unions should represent the real needs and wishes of the workers and enter into negotiations with (unions of) employers, while governments must make laws that protect the interests of the workers and enforce these laws. Buyers have a responsibility to see to it that workers' rights and interests are respected in the whole production chain. Where higher wages are paid, the growth of family income will allow them to send their children to school instead of sending them working at a young age to earn a supplement to the family income.

5.3.2 Migrant labourers

Seasonal migration is different from permanent migration in the sense that these migrants do not look for a permanent different place to live but move to those places where seasonal work is available, such as in agriculture where the number of labourers needed depends on the season[4]. Payment of fair wages makes it more attractive for seasonal labourers to move to areas where these basic rights are respected.

5.3.3 Child labour

Child labour often is the result of poverty of the parents. Sending a child to school means that fees must be paid, school uniforms bought and most important, a potential source of revenue falls away. When parents earn more, more children can go to school instead of having to earn a supplement to the family income. So, a higher income for the parents leads to less child labour.

According to Venkateswarlu, the available data of a study in India suggest that the rise in wages on cottonseed farms has had a positive impact on child labour. The incidence of child labour in the locations studied has come down. According to the author increased wages, thanks to the increase in procurement prices paid to the farmers, have played an important factor in the reduction in the employment of child labour on cottonseed farms.

First farmers could not afford to pay minimum wages because of the low procurement prices they received from the seed companies. When farmers received higher prices, farmers could afford to pay more to their labourers. This led to a decline the proportion of child labour to the total workforce on cottonseed farms declined from 57.4% in 2003- 04 to 29.8% in 2009-10 (Venkateswarlu).

5.4 Effects on consumer prices

5.4.1 Price elasticity

When Fair Prices are paid, the likely outcome for the consumer is a higher price for the product. Whether this has effect on total demand, depends on the price elasticity. Normally in the case of higher prices, demand for basic products such as basic foods remain stable, if the consumer has the necessary monetary means at least, and demand for luxury products diminishes. That is the case when there is a stable situation, let's say when there is a market of let's say 100 million. When the size of the market grows however, e. g. by population growth, to 120 million, total demand grows, and this has an upward effect on prices. This may happen even when some customers quit because of the higher price. So, there may be a difference between short term and long-term prospects concerning price effects in a

[4] In India alone there are 100 million labourers who work seasonally and circulate between their rural homes and far-away worksites in more developed parts of the country at different times of the year (*Shriyan and Kumar*)

market situation. This is the case even when market concentrations such as monopolies and oligopolies are left aside.

5.4.2 The production chain

There are more aspects to the effects of the payment of Fair Prices to consumer prices that must be highlighted though. One is the aspect of price forming in the production chain. Below is a hypothetical case of a product whereby labour in the initial phase is rewarded with an amount of € 20. At each step in the chain prices rise with a certain amount, that can be expressed in a percentage, leading to a consumer price of € 143. This is shown in Table 1.

Theoretical schemes of effects of higher producer prices on consumer prices

Table 1 Initial situation

	Initial wages 20 €		
	€	**price increase in €**	**price increase in %**
Labour	20		
Material	20		
Rent	5		
Other costs	5		
Total production costs	50		
Profit	5	5	10%
Subtotal	55		
Transport	8	8	15%
Subtotal	63		
Shipping and Handling	13	13	20%
Subtotal	76		
Transport and handling costs country of destination	4	4	5%
Storage	4	4	5%
Subtotal	83		
Profit importer	17	17	20%
Subtotal	100		
Costs and profit retailer	30	30	30%
Subtotal	130		
Taxes 10%	13	13	10%
Consumer price	**143**		

Table 2 shows how a change in the remuneration of labour with € 20 in the initial stage leads to a new consumer price of € 201. This change from € 143 to € 201 can be explained by the fact that percentages are used instead of amounts.

Table 2 Usual effects of higher producer prices on consumer prices

Doubling of wages,		
other costs in percentages		
	price increase in %	**€**
Labour		40
Material		20
Rent		5
Other costs		5
Total production costs		70
Profit	10%	7
Subtotal		77
Transport	15%	12
Subtotal		89
Shipping and Handling	20%	18
Subtotal		106
Transport and handling costs country of destination	5%	5
Storage	5%	5
Subtotal		117
Profit importer	20%	23
Subtotal		140
Costs and profit retailer	30%	42
Subtotal		182
Taxes 10%	10%	18
Consumer price		**201**

In the example of Table 1 the profit of the importer is an amount of € 17, or 20%. When the wages of the workers are doubled from € 20 to € 40, the profit of the importer rises from € 17 to € 23 as shown in Table 2.

This rise in profit takes place without any more work or costs for the importer.

Table 3 shows the situation where calculations are made in amounts instead of in percentages. The amounts mentioned in Table 1 are used in this table instead of the percentages used. There is no reason to suppose that e.g., transport and handling are more costly or that profits should rise, when labour in the initial phase is better rewarded.

Table 3. Situation when calculating in fixed amounts instead of percentages.

Doubling of wages,		
other costs fixed		
	price increase in €	**€**
Labour		40
Material		20
Rent		5
Other costs		5
Total production costs		70
Profit	5	5
Subtotal		75
Transport	8	8
Subtotal		83
Shipping and Handling	13	13
Subtotal		96
Transport and handling costs country of destination	4	4
Storage	4	4
Subtotal		104
Profit importer	17	17
Subtotal		121
Costs and profit retailer	30	30
Subtotal		151
Taxes 10%	13	15
Consumer price		**166**

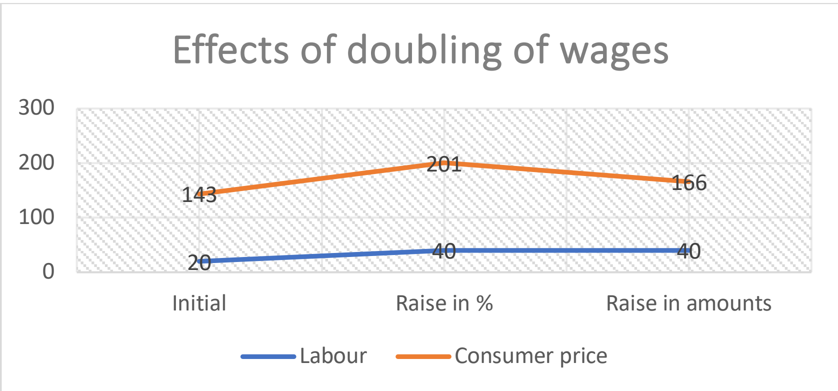
Source tables 1 – 3: Bronkhorst (2020)

Comparison of results

In this example above the initial profit of the importer is an amount of € 17, or 20%. When wages of the workers are doubled from € 20 to € 40, the profit of the importer will rise from € 17 to € 23. This rise in profit takes place without any more work or costs for the importer.

If, however, the importer would be satisfied with the same profit as before, namely € 17, and all others in the chain will do the same, the result will be a consumer price of € 166 instead of € 201. This means that the direct effects of the wage increase are limited to the amount of the wage increase (€ 20) plus more taxes (€ 18 instead of € 13 because taxes are always expressed as a certain percentage). The consumer will have to pay more (€ 166 instead of € 143), but much less than in the case where percentages are used (€ 166 instead of € 201). Graph 1 shows the different results again.

Graph 1 Effects of doubling wages on consumer prices



This simple example clearly shows that attention should be paid not only to the remuneration of workers, but also to the remuneration of all other actors in the chain such as importers and retailers, and to the way calculations are made.

6. Effects on local economy

6.1 Multiplier effects

Purchasing power of farmers (because they receive a Living Income) and of agricultural workers (when they are paid living wages) rises. This will have its effect on local shops and industries that will benefit from this rise in disposable income. This only occurs in the measure that additional income does not leak away through additional imports and profits that leave the country to foreign destinations.

Multiplier effects do not always occur though, as shown by research into the effects of Fairtrade (FT) in Costa Rica. The report indicates positive effects on households but found no evidence of income benefits for those not working in the coffee sector. For those in the coffee sector, the benefits found were concentrated among farm owners only. They also found that the largest and poorest group in the coffee sector – unskilled workers – did not gain at all from FT. Also, no evidence was found of positive spill over benefits to those in the local community who work outside of the coffee sector. (Dragusana et al). This report implies that FT coffee farmers when earning more, do not always share this increase in income with their workers. This is the more important since one of the intended effects of the payment of Fair Prices is that workers are paid living wages. When this does not happen, as seems the case in this Costa Rica case, a great deal of the benefits for the local economy does not materialise. That no spill over benefits to those in the local community outside the coffee sector were found, might be because the group of FT farmers is rather small compared with the rest of the population. Otherwise, it is difficult to explain why the rest of the population, local shopkeepers and craftsmen, did not profit from the increased income of the FT farmers. When this does not happen, as seems the case in this Costa Rica case, a great deal of the benefits for the local economy, does not materialise. So, it is important that ways are found to oblige farmers who are receiving Fair Prices for their products, share these benefits with all their workers, casual or not.

6.2 Effects on poor city populations

The fact that large parts of the population will benefit from the payment of Fair Prices and living wages, does not take away that another part of the population will be confronted with negative effects. When farmers earn more with the production of food crops, consumers who are not producers will pay more for their food. Think of poor segments of the city population. Often, they are migrated to the cities to escape from the poverty in the rural areas. In the long run however, more investment possibilities for the farmers may lead to higher productivity and that way finally to lower consumer prices.

This drop in spendable income for the poor is a policy aspect that should be considered by policy makers. Some actions that governments could take when this drop in spendable income occurs, are 1. the removal of supply-chain obstacles to ensure that consumers do not pay excessive prices (see 1.5.4.2) and 2. setting up of food stores for the poor.

7. Effects on environment

Payment of Fair Prices will make more investments to change to a more circular economy possible. The growth in income enables the farmer to switch to other crops that may be more adapted to the changing climatic conditions. For farmers working with trees such as coffee and cocoa, more funds can provide them with the means for a better upkeep of their trees. Schooling for children may also provide the parents with new agricultural techniques and handling of new instruments (mobiles, internet etc).

An important aspect to be discussed here is whether paying Fair Prices will lead to a situation of overproduction. To answer that question, let's first have a look at a situation where there is a productivity rise only.

In the common situation with prices determined by equilibrium of supply and demand, a productivity rise can lead to overproduction and falling prices. The result is less income and a deteriorating situation for the farmer unless he/she succeeds in producing so much more that this outweighs the loss in income because of the falling prices. This need for an even larger production rise can lead to expanding of the producing area and more exhaustion of the soil.

Whether overproduction will occur, also depends on how demand changes. With population growth and a change in consumer preferences, demand may change in time leading to a higher or to a lesser demand.

Should the farmer receive Fair Prices though, the need to take new areas of land in production and exhaust the soil is less because he already earns a Living Income, and he/she is able to pay for environmental suitable solutions to prevent soil exhaustion.

This is an argument for the payment of Fair Prices instead of fixing on productivity rises only, which too often is seen as the magic bullet to solve all problems, but too often leads to environmental problems as well.

It may be profitable for other farmers though, to change to another, better rewarding product. When for let's say cocoa, Fair Prices are paid but not for other products, farmers may change to cocoa production. This problem does not exist for cocoa only, but for all traded products. This highlights the problem that well-meant interventions in one production chain may lead to unwanted side-effects. This problem can only be solved when Fair Prices are paid for all products and not for one product only. That implies the need for the payment of Fair Prices and wages in the whole economy, a task for governments and international agreements.

So, the danger of overproduction and overexploitation always exists, but in the case of Fair Prices being paid, the farmer continues to receive a Living Income and has more possibilities to continue farming in an ecological friendly way. Besides there is the argument that has been mentioned before that demand may change during time.

So in each case it is necessary to make an analysis of the chain : where are the bottlenecks and how can these be removed, to prevent excess profits by some and underpayment of others.

8. Effects on Government finances

Governments may benefit from higher tax incomes when incomes rise. This in turn will enable them to organize a system whereby more attention to long-term ecological effects of the current way of agriculture is paid. By actively advocating the payment of Fair Prices to producers and living wages to the workers, governments can show the importance they attach to better living conditions for their population. On the other hand, measures such as setting up of food stores for the poor will influence government revenues negatively.

9. Approaches to Fair Prices

9.1 Living Income / Fair Price Approach

In this approach the Fair Price is defined as follows:

$$\text{Fair Price per kg} = \frac{\text{Total costs} + (\text{Living Income} - \text{additional income})}{\text{Production in kg}}$$

In this definition an extended version of Living Income is used, in which a certain percentage is added to provide for additional investments.[5] With additional income one can think of the products of a vegetable garden, raising chickens etc.

The minimum price the producer should receive to attain a Living Income and pay the laborers fair wages, is called the 'Fair' price. 'Fair', here, does not imply that a higher price cannot be more beneficial, but that any price below this Fair Price is not sufficient, so this is the absolute minimum price the producer must receive.

This price is based on actual, real production costs and costs of living.

An important assumption is full employment of the family members, as well as a fair intra-household distribution.

In case there is no full-employment, a 'Not-fully employed' price can be calculated, a price that the farmer should receive to obtain a Living Income. This is a price that cannot be realised, but is the situation the farmer finds him/herself in. Calculation of this price can be useful for policymakers[6].

On the next page **a Living Income / Fair Price Calculation model for coffee** is given**.**

[5] The percentage can vary from region to region according to the needs caused by climate change.
[6] For a detailed description of this methodology see Bronkhorst 2020

Living Income / Fair Price Calculation model Coffee

Fair Price (Amount/kg) = (Total Costs of coffee production + Living Income – Additional Income)

Coffee Production in kg

COFFEE PRODUCTION

Size of the farm (ha)
To be determined

Size of the farm used for coffee(ha)
To be determined

Coffee Production in kg/ha
To be determined

Total coffee production in kg
*Production/ha * size of the farm used for coffee*

TOTAL COSTS of Coffee production
All on-farm costs related to coffee
To be determined

INCOME

LW per adult earning family member per working day
(LW pp * number of adult earners) / working days)
[Amount]

Additional Investment costs
[To be determined]

Living Income per year
[To be determined]

Additional Income
(Revenue other products – costs other products)

Product A	**Product B**	**Other**	**Total**
Amount	*idem*	*idem*	*idem*

Revenue other products

Product A	*Product B*	*Other*	*Total*
To be determined	*idem*	*idem*	*Amount*

Production costs other products

Product A	*Product B*	*Other*	*Total*
To be determined	*idem*	*idem*	*Amount*

Source: modified table from Bronkhorst, 2022

9.2 Living Income Reference Price Models

The so-called Living Income Reference Price Models here-after are in that way comparable to the Living Income / Fair Price Approach, that they do not take the usual market price as guiding principle but look at the farmers costs and needs first. They do not use the word 'fair' however and use slightly different assumptions.
For a more detailed guide how to calculate reference prices in different production scenarios, see Loos et al, 2022.

9.2.1 Fairtrade[7]

Fairtrade Int. is actively working on the issue of Living Income Reference Prices for their products, such as coffee and cocoa.
The Fairtrade Living Income Reference Price Model is based on the following key parameters:

- Cost of a decent standard of living (Living Income benchmark)
- Sustainable yields (productivity benchmark)
- Viable farm size (to fully employ the available household labour)
- Cost of sustainable production (to achieve above mentioned yields).

The difference with the Living Income / Fair Price is that here not the actual situation is taken as point of reference, but an ideal, future situation (sustainable yields and production and viable farm size instead of actual farm size).

9.2.2 GIZ methodology

The GIZ methodology is a more general method that allows the setting of prices against any benchmark including for example poverty lines (Krain). A publication by Eberhard Krain 'Cost, Returns and Income Modelling of Farmer Cocoa Production in the Project Region of PRO-PLANTEURS, Côte d'Ivoire' is a detailed application of this methodology. This approach applies the same assumptions as the Living Income / Fair Price Approach does concerning full employment and a fair intra-household distribution.
The following formula is used to calculate a Living Income reference price.

$$BM_{rp} = \frac{\frac{BM_w}{WD} * NoWDs + CP}{Y}$$

Source: Krain (2022)

whereby:

$\boldsymbol{BMrp}$ A Living Income (or other benchmark) reference price in monetary values (e.g., a currency unit e.g., in FCFA) for a particular crop or agricultural activity per usual weight or volume unit (e.g., per kg, ton or litre) per unit area of production (e.g., per ha)

$\boldsymbol{BMw\ WD}$ A benchmark "wage" per workday e.g., a Living Income per workday in FCFA

[7] The Fairtrade approach for coffee is discussed more in detail in Bronkhorst (2022)

$\boldsymbol{NoWDs}$ Number of workdays needed to produce a certain yield per unit area.
$\boldsymbol{CP}$ Cost of production (input and service cost, but no labour cost) per unit area e.g., in FCFA
$\boldsymbol{Y}$ Yield of the crop per unit area for which the benchmark reference price is calculated e.g., in kg.

Here the calculation is made for two scenarios, for the "current production" and the "improved production". The current production scenario reflects the costs and incomes of the existing situation and reference prices are calculated against this scenario. Additionally, also the "improved production" scenario is determined, and reference prices based on that scenario are calculated.

In this approach the gap to a Living Income can be closed by
a. productivity increase, and
b. price increase.

A difference with the Living Income / Fair Price approach is that GIZ advocates a reference price for the farmers who apply good agricultural practices, not for those who just apply ordinary or prevailing practices, as is the case in the Living Income / Fair Price approach.

"The reasoning behind the good agricultural practice model is to include the holistic understanding that all stakeholders in (international) supply chains must contribute to close the gap towards Living Incomes. This also includes the farmers responsibility to manage their land and natural resources well. But with evidence showing that farmers often cannot cover the costs of sustainable production working towards sustainable production and decent livelihoods must be accompanied by appropriate farm gate prices, long-term purchasing commitments, etc. to complement each other" (Loos et al).

9.2.3 Cocoa Barometer

In reaction on the approaches in which reference prices are calculated on basis of sustainable yields and cost of production, and viable farm sizes, Fountain and Hütz-Adams (authors of the Cocoa Barometer) calculated a Necessary Farm Gate Price, based on the real situation the farmer is in. This Necessary Farm Gate Price is the price that is needed to achieve with cocoa the necessary part of the Living Income earned with cocoa.

10. Conclusions

It can be concluded that the payment of Fair Prices is a matter of necessity. There is a need to pay Fair Prices because

- Human Rights and its consequential international obligations require a decent living for workers and their families,
- Prices, and esp. international prices, are based more on power relations (monopolies, oligopolies etc) than on the equilibrium between supply and demand between equal partners. Therefore, we cannot consider actual market prices, optimal prices. This system is at the detriment of small farmers and workers and should be replaced by a system that is based on Human Rights,
- The worldwide problem of Climate Change forces small producers to invest more than before,
- Fair Prices enable producers to pay living wages prices to their workers.

An important aspect that must be taken into consideration when paying Fair Prices, is that benefits should not remain at the level of the employer only. It must be made sure both at national and international level that when employers are paid Fair Prices, workers are paid Living Wages. Fair Prices alone are not sufficient to assure employees of a decent income.

Introduction of Fair Prices in the economy requires a paradigm change from the usual approach based on supply and demand, a method that has proven not to be adequate to assure a decent income to all involved in the chain, to a system based on Human Rights, Living Wages and Living Income.

Several approaches exist to determine Fair Prices, Living Income Reference Prices and Necessary Farm Gate Prices. Each approach uses different assumptions about actual and sustainable yields and farm size. These assumptions lead to different Fair and Living Income Reference Prices. The choice between them depends not on theoretical considerations only, but also on the possibility of achievement.

The effects of payment of Fair Prices on producers, workers and the local economy should be further analysed per country and per region. To do so, monitoring and evaluation systems must be put in place. This will enable the development of valuable insights.

On basis of the analyses following the results of the monitoring and evaluation, concrete policy advice can be formulated and reformulated for each country and situation.

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Abbreviations

CESCR	Committee on Economic, Social and Cultural Rights
FP	Fair Price
FT	Fairtrade
ICCPR	International Covenant on Civil and Political Rights
ICESCR	International Covenant on Economic Social and Cultural Rights
LI	Living Income
LW	Living Wage
SDG’s	Sustainable Development Goals
UDHR	Universal Declaration of Human Rights
UN	United Nations
WB	World Bank