An approach to calculate 'Fair' prices and wages

The Fair Trade movement often claims to pay the producer a 'fair price' for his products. There is no uniform economic definition of the word 'fair' however, with as a consequence that the word is meaningless. This article gives some approaches how to define 'fair price' in India, starting with the calculation of 'fair wages'. A method is developed to calculate minimum fair wages and prices for the unorganised sector, where there are no trade-unions to represent the workers in their negotiations. Then the approach is applied to other countries as well.

Introduction

The purpose of this paper is to contribute to the discussion how to develop a practical system for calculating a 'fair price' to be paid to the producer and, related to it, the 'fair wages' that should be paid to the worker.

The system that is proposed will calculate as objectively as possible the bottom line for the payment of the worker by the producer, and following that, the bottom line for the price to be paid by the customer to the producer. The point of departure is to have a methodology that can be easily applied by everyone involved. Thus the purpose of this paper is not to provide a detailed theoretical model, but rather a model that can be easily applied in practice.

The structure of this paper is as follows: On the basis of the example of India first the methodology for defining 'fair' minimum wages is set out, and then the method for calculating these wages in India. The example of India is chosen because here a system already exists that can be adapted to other countries as well. The exercise is structured around three Indian states and a group of workers that is often ignored, namely artisans in Delhi, Jaipur and Pondicherry. All these workers are working in the unorganised sector where trade-unions don't play a role.

The system how the poverty line has been fixed in India and how figures per state differ will be dealt with first. Data on the average size of the household enable us to calculate the poverty line per household and the 'living wage'. The results are assembled in a table, which also includes the idea that the minimum wages should be at such a level as to take a family of 3 adult units of consumption above the poverty line. This way a 'minimum fair wage' can be calculated. With the help of this 'minimum fair wage' the 'minimum fair price' can be defined.

Then the methodology will be applied to other countries as well.

A short conclusion follows.

The first part of the article is a somewhat shortened version of an article I published originally in the Indian periodical "Economic and Political Weekly".[1] The present article, however, also presents possibilities to apply the approach to other countries than India.

Minimum fair price

Payment of a minimum fair price to the producer implies both that the firm is making enough profit at least to assure continuity, as well as the payment to all workers involved of a salary

[1] Economic and Political Weekly, volume 39, no 34 August 21, 2004

that meets the cost of living for themselves and their dependants (partner, children, parents). Besides that additional money is needed for other expenses, such as marriages, funerals etc. Therefore first the question that is dealt with is in what way to define the minimal necessary wages for workers. After that the minimum fair price is discussed.

Minimum rewards

Point of departure to calculate a bottom line for wages is set by a) the legal minimum wages and b) the poverty line.
Legal minimum wages are different for each country and will therefore not be discussed here[2]. In this article we will concentrate on the poverty line.

Poverty line

The poverty line per capita in India as defined by the Planning Commission is based on the number of calories needed daily per person. This quantity has been defined in 1968 by a Nutrition Expert Group and has been fixed at 2400 calories per capita in rural areas and 2100 calories per capita in urban areas. The difference in quantities of food needed in rural and in urban areas is due to the fact that living conditions in rural areas are more demanding. For instance people have to walk great distances to have access to water.
The quantification of the number of calories needed was after research translated into monetary units to answer the question: How much money is spent on average to achieve the necessary quantity of calories? Data for this came from an expenditure survey at the group involved. From this survey it appeared that, based on the actual consumer behaviour, in 1973-74 on an average Rs 49.09 a month was associated with a daily intake of 2400 calories in rural areas, and Rs 56.64 per month with a daily intake of 2100 calories per capita in urban areas. So the poverty line defined this way is partly normative and partly behavioural. It indicates the monetary value needed to achieve the specific quantity of calories needed, taking into account the need for other, non-food related, expenses.
These amounts needed are adjusted regularly through follow-up investigations recurring at set periods.

Such a macro approach obviously meets with many objections such as that there are differences in calories needed between different occupations, differences between men and women, etc. When calculating an average such differences get lost. Other missing factors that should be mentioned include access to water, lack of possibilities for development, forms of discrimination etc.
In spite of the obvious disadvantages, in India the choice has been made for this approach, and we follow this choice in order to arrive at a practical system for calculating ‘fair’ wages. The amounts calculated for 1973-74 have, based on follow-up surveys, regularly been adjusted during the years.

Different amounts for the poverty line for different states have been calculated at an official level. This is because India is such a large country with so many regional differences.

[2] For those who are interested in this in the case of India, see Ruud Bronkhorst in: Economic and Political Weekly, volume 39, no 34

Table II *State wise Poverty lines for the year 1999-2000 in Rs per capita per month*

State/Union Territory	Rural Poverty line	Urban Poverty line
Rajasthan	344.03	465.92
Delhi	362.68	505.45
Pondicherry	307.64	475.60

Source: Planning Commission, Government of India

The poverty line indicates an amount per month per capita. Not everyone within a household earns income, however. The following table indicates average size of households in Rajasthan, Delhi and Pondicherry.

Table III *Average Household Size by State/Union Territory 1999-2000*

State/Union Territory	Rural	Urban
Rajasthan	5.6	5.0
Delhi	4.4	4.4
Pondicherry	4.2	4.0

Source: Manpower Profile India, Yearbook 2001 table 1.17

The poverty line per household is obtained by multiplying the poverty line by average household size.

Table IV *Poverty line in Rs per month per household by State/Union Territory*

State/Union Territory	Rural	Urban
Rajasthan	1927	2330
Delhi	1596	2224
Pondicherry	1292	1902

Living Wage

The data concerning the poverty line and average household size can be used to calculate the 'living wage' according to the *1998 Living Wage summit formula*[3]:

$$\frac{\text{Average household size } \mathbf{x} \text{ cost of basic needs per person}}{\text{Average number of adult earners per household}} + \text{savings (set at 10\% of income)}$$

The living wage is to be earned over a maximum working week of 48 hours and basic needs are defined as housing, energy, nutrition, clothing, health care, education, potable water, childcare, transportation and savings, though the possibility of including further need

[3] David Steele: The "Living wage" Clausule in the ETI Base Code, ETI, June 2000, p.6

categories (e.g. entertainment, vacation, paid family leave, retirement, life insurance and personal liability insurance) is floated[4].

In our case both average household size (table III) as the cost of basic needs per person (poverty line) are known.
The ‘average number of adult earners per household’ however, is not so easy to obtain. Although many married women do have a paid job, this certainly does not apply to all of them. For cultural reasons, many women are not allowed to work outside the home. Where women, both married and single, are allowed to work outside the home, it often is only in places where the working place is considered ‘safe’ for them. The ‘Labour Force Participation Rate’ gives the following picture:

Table V *Labour Force Participation Rates by State/Union Territory, 1999-2000*

State/Union Territory	Rural		Urban	
	Male	Female	Male	Female
Rajasthan	50.3	38.8	49.9	14.1
Delhi	54.1	3.7	54.6	10.9
Pondicherry	58.8	29.4	57.4	18.1

Source: Institute of Applied Manpower Research, Manpower Profile India, Yearbook 2001, table 2.2.2

Like all data, these should be carefully used. There is always the danger of drawing too many conclusions from data that cannot entirely be relied upon. What these data do indicate, however, is that many more men than women have a paid job.
What can indeed be concluded is that we cannot take for granted the fact that both man and wife have a paid job. This has its consequences for the calculation of the living wage. The outcome will be different when we make the calculation with 1, or with 2 income earners per household.
On basis of this it seems incorrect to make the calculation of a ‘living wage’ on the basis of 2 income earners per household. It seems preferable to calculate it on the basis of 1 – 1½ income earner per household.
This leads to the following quantification concerning the ‘living wage’.

In case of 1 income earner per household

Table VI *Amount of the Living Wage per month in Rs by State/Union Territory in case of 1 income earner per household*

	Amount Living Wage (Rs)	
State/Union Territory	Rural	Urban
Rajasthan	2141	2588
Delhi	1773	2471
Pondicherry	1436	2114

[4] ibid

In case of 1½ income earner per household

Table VII *Amount of the Living Wage per month in Rs by State/Union Territory in case of 1½ income earner per household*

	Amount Living Wage (Rs)	
State/Union Territory	Rural	Urban
Rajasthan	1427	1.726
Delhi	1182	1.647
Pondicherry	957	1.409

It is evident that the decision how many income earners per household to use for the calculations so as to arrive at a ‘reasonable’ minimum wage for the worker is a very important one.

In India it was recommended (without being put into effect) by two different State Committees that the minimum wages should be at such a level as to take a family of 3 adult units of consumption above the poverty line. This advice can be applied here as well. The advantage of it is that it makes further research into the number of income earner per household superfluous.

The choice to be made here, namely, where to place the borderline, is essentially a policy choice. That a clear choice has to be made, however, is important for the Fair Trade movement in order to retain its credibility.

Several alternatives concerning the minimum earnings per month have been calculated above for several states/union territories for the household to function at the level of the poverty line, both in rural and urban areas.

The following two tables put these results together.

Table VIII *Minimum amounts in Rs calculated per month for Rural areas per State/Union Territory*

State/Union Territory	Poverty line Household	Living Wage 1 income earner	Living Wage 1½ income earner	Proposal Commission
Rajasthan	1927	2141	1427	1032
Delhi	1596	1773	1182	1088
Pondicherry	1292	1436	957	923

Table IX *Minimum amounts in Rs calculated per month for Urban areas per State/Union Territory*

State/Union Territory	Poverty line Household	Living Wage 1 income earner	Living Wage 1½ income earner	Proposal Commission
Rajasthan	2330	2588	1726	1398
Delhi	2224	2471	1647	1516
Pondicherry	1902	2114	1409	1427

These data are the result of different ways of calculating a bottom-line to wages that all give different results. As said before, a choice has to be made between several alternatives. This choice depends on what level of living can be agreed upon as being the absolute minimum. Here different choices may be made, and will be made, between say the Fair Trade movement and the management of a factory that barely succeeds in keeping the business going. Yet it is very important that the Fair Trade movement clearly defines what in its opinion the absolute minimum is that workers need to live on.

Once the minimum is defined, it would be good to look at every firm separately to find out the situation of the workers with regard to how many people there are in the household, and how many adult income earners the household has. This, however, would result in different wages within the same firm for workers performing the same jobs.
As mentioned above, a practical solution to this problem may be what was recommended in India for the minimum wages, namely that minimum wages should be at such a level as to take a family of 3 adult units of consumption above the poverty line. This recommendation extended to the concept of 'fair' wages means that once a bottom line to the 'fair' concept has been chosen, 'fair' wages should be at such a level as to take a family of 3 adult units of consumption above the bottom line.

It should be kept in mind however, that the concept of 'poverty line' in itself has nothing to do with 'fair wages'. It is only used here as a 'tool' to be used in the calculation of fair wages. When discussing the poverty line we are talking about absolute minimum amounts to survive and not about the concept 'fair'. When discussing 'fair' an ethical aspect gets involved. At that moment we are not discussing only minima to survive but will other criteria play a role as well. The outcome may be that wages are considered 'fair' when they are sufficient to take a family of 3 adult units of consumption above the poverty line, but it may be any other outcome as well. It should be made explicit, however, by all who talk about fair wages what their definition of fair is, so that people can agree whether they call this fair as well or not. This is especially true for the Fair Trade movement, where customers are attracted by the promise that the producer a fair price is paid, which implies fair wages to the workers as well.

An additional remark should be made regarding home-workers and part-time workers. The amount earned during the hours worked should be divided by the actual number of hours worked and then multiplied by 48 (the maximum working week according to ILO-standards), so as to arrive at the income they should have earned had they worked that many hours.

Minimum fair price

Once a decision has been taken how to define and calculate 'minimum fair wages', we can relate the 'minimum fair price' to the 'minimum fair wages'. In this context it is important to remember the target-group, defined on page 1 of this paper, namely artisans. This often means smaller firms with few workers who are not organised in trade-unions. The fact that there are no trade-unions plays an important role in the sense that where those unions do exist, there is a different possibility for calculating 'minimum fair wages' as well. After all the unions are supposed to speak on behalf of their members and (should) know what the aspirations of their members are, and what they themselves consider 'fair'.

Apart from the legal minimum wages, firms should pay their workers at least ‘minimum fair wages’. These ‘minimum fair wages’ can be calculated with the aid of any of the methods described above, but they should be defined in any case.

After defining the ‘minimum fair wages’, we can proceed to the ‘minimum fair price’.
The price the producer gets for its products should be such that:

a. the price is sufficient to pay all costs, both fixed and variable costs,
b. this price is sufficient to guarantee continuity of the enterprise,
c. all workers get paid at least a ‘minimum fair wage’ as well as the legal minimum wage,
d. the producer himself has an income that equals at least both the ‘minimum fair wage’ as well as the legal minimum wage,
e. this price is sufficient to expand the business in a gradual way.

This leads to the following definition of ‘minimum fair price’:

A ‘minimum fair price’ can be calculated in those cases where it is possible to calculate both production costs and ‘minimum fair wages’. In that case the net price to be paid to the producer is at least such that continuity and development of the firm are guaranteed, while at the same time all workers get at least the local ‘minimum fair wages’ as well as the legal minimum wages.

How to apply this approach in other countries

The above explained approach can in a slightly different way be used for other countries as well. This will be less easy to execute than in the case of India however. In India a great deal of the work has been done by the Indian Planning Commission, which is part of the Indian Government. They do the research to establish the poverty line, a job that is not done in most other countries. So how to proceed when this information is not available?
First of all a diet has to be defined. In India this was defined as 2400 kcal per capita in rural, and 2100 kcal per capita in urban areas. This does not mean that these figures apply to every country. In each country dietists will have to establish a balanced diet on basis of the food habits common in the country, and look at the ingredients needed for that diet. Then the next step will be to establish the cost of such a diet.
While in India research is done to find out the relationship between income spent on food and total expenses, this will not be the case in most other countries. Therefore we have to look for an alternative to establish this connection.
Statistics should be searched providing information about the consumption expenses of families having the defined necessary diet. This is a difficult process because data from different statistics will have to be compared. There are a number of possible sources to obtain the necessary data. These are first the national governments, universities and research institutes, but also different organisations of the United Nations (FAO, UNICEF, UNDP, WFP etc) and the World Bank can provide much information. Then there are Embassies who because of their role in the monitoring and execution of development projects are in the possession of much information as well. By comparing these data it will often be possible, in the absence of large research projects, to arrive at an estimation of a poverty line. Once this poverty line has been established, the lower boundaries of both fair wage and fair price can be calculated following the approach used in the case of India.

Attention should be paid however, to those cases where workers do not work the whole year, but only during some weeks, or do the work next to their main job in the fields or so. Here wages must be calculated as if the worker has this job during the whole year, 6 days a week. That means that the wage of a worker who works only half days, and so during the whole year, must be multiplied by two to find out whether the bottom line of the "fair wage" is earned.

To do so involves quite some work and it cannot be expected of individual producers and importers to do all this. By working together with coordination of IFAT and/or national/regional fair trade associations however, a lot more can be achieved and it will often be possible to arrive at a calculation of the lower limits to 'fair wage' and 'fair price' per country.

Conclusion

Even in the absence of trade-unions to protect the workers' interests, there appear to be several possibilities to define 'fair' wages and, following that, 'fair' prices. Although a lot of data are required to do so, it appears in India possible to find those data to calculate a minimum (the bottom line) for both wages and prices. This is also because so many data are already in the concept of 'poverty line'. These data can be taken as point of depart to calculate 'fair' wages and prices once the concept 'fair' has been clearly defined.
By making an effort, this approach can be applied in other countries as well. An active coordination role for IFAT and/or national/regional fair trade associations is desirable.

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