

# *A Review of the Colombo Cost-of-Living Index Number*

## **A Reply to the Criticism**

I am unable to accept any of the criticisms made by Mr. Williams of my article on the Colombo Cost-of-Living Index Number, published in the last issue of the *University Review*. On the other hand they have convinced me more than my own research, that "the Government had done something quite incorrect" and harmful to the interest of the country, in revising the basic family budget in 1942, especially, in the way it was done. The economic problems which made the Government change the basic family budget were more or less the same in every other country. The rapid rise in prices and the scarcity of consumers goods during the war-period produced great changes in the consumption patterns of all countries in the world and not of Ceylon alone. Yet Ceylon is the only country in the world where the government thought it necessary to change the basic family budget. It cannot be maintained that the statisticians of other countries were ignorant of the necessity to suggest such changes. Yet they did not make any changes in the basic-budgets, because, the continuous flux in which the war-period consumption pattern got involved, precluded the selection of any particular consumption pattern as the basic pattern.

The method used by the Special Committee appointed by the Ceylon Government to draw up the new family budget is a strange method, something novel to any statistical study. The new index was not based, according to Mr. Williams, on a family budget enquiry; "it was merely an estimate . . . as to what likely to have been the pattern of consumption in 1942", (p. 321); it was a "guess", (p. 322); "an artificial budget", (p. 321). Mr. Williams was not, perhaps, wrong when he suggested that my "laborious research" into the basic-budget pattern was "absurd", and futile. If I could have guessed that the basic family budget pattern was the product of fanciful imagination, I would not, perhaps, have taken the trouble to apply such a rigorous analysis in reviewing it. Neither the *Sessional Paper* in which this family budget was presented, nor any other official publication or statement, showed that this index had such an arbitrary basis. This is the first time that an official admission is made. It is known that the cost-of-living index plays an important, and on occasions, a decisive, role in the modern community, not only in securing industrial peace, but also in the successful prosecution of economic policy. I am, therefore, very surprised to learn that the Colombo Cost-of-Living Index had no objective basis whatsoever.

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Mr. Williams says: "it would seem even from the analysis made by Mr. Sarkar, that the committee had guessed at the real pattern of consumption *very accurately*" (italics mine). On the contrary. I have shown in my article that the pattern of consumption on which the 1942-index was based, was arbitrary, inaccurate and substantially at variance with the real pattern of consumption.

For, the accuracy involved here is determined by two considerations, one qualitative and the other quantitative. Qualitative accuracy is much easier to obtain, than the quantitative. It involves determining the direction of consumption. Mr. Williams has offered explanations for the increase in consumption of 4 commodities only, *viz.* flour, potatoes, vegetables and bread. Even if we accept these explanations, how would he explain the increase in consumption of cloth, sugar, kerosene and 13 other commodities which, according to his basic consumption pattern, have been actually shown to have gone up in consumption during the war-period? The quantitative determination of consumption is an admittedly more complicated task. How did the Committee guess the actual quantities of the articles that working-class families consumed every week? To claim that they guessed also the quantities *very accurately*, is to lay claim to an omniscience that takes this discussion into the realm of mysticism.

Mr. Williams has altogether failed to understand the error I pointed out in the method he used to link the old index to the new, and has tried to refute my argument by raising a cloud of the well-known theoretical difficulties involved in the construction of cost-of-living index numbers. The error I pointed out has nothing to do with such theoretical considerations, but is of a much simpler nature.

The method that Mr. Williams has used to link the new index to the old, is simply to multiply the new index by 1.83. He does this because according to the old index the November, 1942-index value was 183, while according to the new index, it was 100. This method of conversion is incorrect. The correct method would be to use the old weights in arriving at the index number for the new period. Let me illustrate the point by an example: suppose there are only 5 commodities to be considered and their prices at 3 periods of time are as follows:—

| Commodity         | Prices (Rs.) |      |      | Weights |       |
|-------------------|--------------|------|------|---------|-------|
|                   | 1939         | 1942 | 1948 | Old     | New   |
| Rice .. ..        | 0.05         | 0.20 | 0.35 | 52.40   | 63.66 |
| Cloth .. ..       | 0.50         | 0.80 | 1.20 | 6.28    | 7.26  |
| Rent .. ..        | 1.00         | 1.50 | 2.00 | 15.96   | 7.06  |
| Fuel and Light .. | 0.30         | 0.60 | 1.00 | 8.36    | 8.78  |
| Miscellaneous ..  | 2.00         | 3.00 | 4.00 | 17.00   | 13.24 |

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The index numbers with the old weights and 1939 as base will be—

|      |    |    |     |
|------|----|----|-----|
| 1939 | .. | .. | 100 |
| 1942 | .. | .. | 164 |
| 1948 | .. | .. | 230 |

With the new weights and 1942 as base, the index numbers are—

|      |    |    |     |
|------|----|----|-----|
| 1939 | .. | .. | 58  |
| 1942 | .. | .. | 100 |
| 1948 | .. | .. | 144 |

Mr. Williams' method of linking the 1948 value to the old series gives  $144 \times 1.64 = 236$ , while the correct index should be 230.\*

Mr. Williams questions the practicability of my suggestion of a continuous family budget survey of a sample of families. I quote without comment an extract from the *Review of the International Institute of Statistics*, Vol. 16, No. 1/4, page 62, which reached me long after the publication of my article.

“*Enquête sur le coût de la vie.*”

L'Institut National de Statistique a enterpris une enquête sur le coût de la vie à Lisbonne”.

Sur cet ensemble on a prélevé un échantillon de 2.5 pour cent. Toutes les familles comprises dans l'échantillon ont été visitées par le personnel de l'Institut qui a relevé celles qui désiraient participer volontairement à l'enquête et qui remplissaient les conditions pour y participer (familles composées de trois personnes au moins).

On a effectué deux types d'enquêtes : l'une dite enquête “longue” d'une durée d'une année, et quatre enquêtes dite “minutieuses”, d'une durée d'une quinzaine de jours chacune réalisées à des intervalles de trois mois cette dernière catégorie d'enquête est destinée à compléter les indications de la première en ce qui concerne l'alimentation. Le 1er juillet 1948, a commencé la première enquête “minutieuse” qui s'est étendu, au début, à 330 familles. On a ensuite commencé l'enquête “longue”.

Un personnel spécial de l'Institut visite périodiquement les familles afin d'examiner les carnets et donner des conseils et des éclaircissements.

L'Institut accorde une prime en argent pour chaque carnet correctement établi”.

All I suggested was that we should undertake continuous miniature family budget surveys similar to the one suggested above. I made the purpose of these surveys very clear in my article. They are not meant to replace the larger survey ; nor are they to be used as the basis for a new index : Mr. Williams has misunderstood me here. To quote from my article, “ It can be used as a check on the price quotations supplied by the retailers. Secondly, any change in the consumption pattern can easily be detected and the index amended whenever the consumption pattern undergoes radical changes”, (pp. 316-7).

\*This error has been repeated again in the *Ceylon Statistical Abstract*, 1949.

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Lastly, Mr. Williams doubts my estimate of the real income of the workers. I estimated not the true real income of the workers, but only an *upper-limit* of that income. There is a big difference between this upper-limit and the true real income. The factors which Mr. Williams regards as errors, have been consciously introduced so that a liberal upper-limit of the real income may be obtained.

The cost-of-living index has wide and extensive repercussions on the economy of a country. That is why so much care is taken in all countries in its construction. We in Ceylon have not realised fully the importance of the index. A consequence has been the presence of errors in it. My interest in this discussion is not merely theoretic, nor is it merely to criticise our cost-of-living index. It was the constructive one of offering suggestions for improving its accuracy and efficiency. For on it to a great extent, depends the determination and success of a correct economic policy. And it is to these suggestions that I would invite the serious attention of readers.

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