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INTERESTING PROPOSALS  
OF THE AMP WORKING PARTY  
ON A NEW PRICING SYSTEM

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I - BACKGROUND

The Working Party (Task Force) to review the AMP and the GMS was agreed upon at the Meeting of the Sixth Common Market Council of Ministers, in the light of complaints and dissatisfaction so often expressed by the MDC's and LDC's alike, as an adequate instrument for fostering development of production and trade in agricultural products in the region. The following are the terms of reference of the Working Party:

"...prepare an appropriate programme of measures for Ministerial consideration with respect to arrangements for intra-regional trade in agricultural products on the basis of studies which the Secretariat has been asked to undertake

and

...to pay particular attention to the Agricultural Marketing Protocol and to submit for consideration at the next Meeting of Council proposals for reviews including a new formula for fixing prices."

Due to the relatively short time period, allowed by the Council for submission of a new formula for fixing prices, the 13th AMP meeting, convened in Jamaica from 20-22 August 1975, considered the possibility of presenting an improved pricing mechanism for the AMP not in the October but by the December meeting of Councils. The 13th AMP meeting decided on the following composition of the Working Group:

"Mr. Lawrence Cross - General Manager of the C.M.A. -  
Trinidad & Tobago

Mr. Douglas Garel - Acting Agricultural Planner - Jamaica

Mr. Hugh Saul - General Manager, Guyana Marketing Corporation

Mr. Allan Guye - Agricultural Officer - Dominica

Mr. A.C. Antrobus - Acting Manager, Marketing Board -  
St. Vincent".

The 13th AMP Meeting considered also the following areas of  
AMP Study;

- "(i) the declaration of surpluses and deficits;
- (ii) the determination of prices;
- (iii) problems of transportation and storage;
- (iv) grading systems and quality control;
- (v) penalties, charges and sanctions;
- (vi) payment for shipments;
- (vii) the extent of extra-regional trade in AMP products;
- (viii) the role of the Secretariat and the effectiveness of the mechanism of AMP Meetings".

After which the meeting agreed that the Working Group should concentrate, in the short run, on designing a rational pricing formula and provided the party with this broad frame for its deliberations;

- "(a) take into consideration market forces;
- (b) be fair to consumers and producers;
- (c) provide for a system of monitoring of prices by CARICOM Secretariat;
- (d) provide for indexation of costs;
- (e) take into consideration the possibilities for zoning or sub-dividing of the Regional Market;
- (f) stimulate sufficient surpluses to adequately supply processing industries in the long run;
- (g) relate total production to total demand;
- (h) bear some relation to the overall goals of rationalization of the Regional Agricultural Sector".

The Working Party's first meeting took place in Georgetown, Guyana 17-18 September 1975, under the Chairmanship of Mr. O. Nurse, CARICOM, Chief Commodities Section. On the basis of the antecedents mentioned above the Working Party agreed to the following points:

- "i) That the full report of the Working Party would be immediately circulated to Governments, and the report would form the basis of the Working Party's submission to Council at the Meeting of 7-11 October;
- ii) That the Working Party would meet again for about four or five days before November 10, 1975 - having allowed a suitable interval for reaction of Member Governments - to draw up final proposals for a price fixing mechanism for submission to the proposed January 1976 Meeting of Council;
- iii) That when the full review of trading arrangements was completed, and before submitting proposals to the Council, the Working Party would invite comments on these from regional experts and organizations which might be interested".

The first meeting spent some time discussing methodological matters, related to the general trading arrangements and the price fixing formula. The broad issues discussed were;

- a) Development of a system of trade with the minimum of intervention in market forces; without disregarding the necessity for direct intervention by national agencies to fulfill agreed objectives;
- b) Inadequacy, within the existing trading instruments, of the system of declaration of surpluses and deficits which results in a call for the freeing of the system of trade;

- c) Allowance of flexibility in the price system (which operates on the basis of a mini/max fixed price) to take account of market effects, within the limits set between minimum and maximum prices; especially in period of scarcity with its tendency to high prices;
- d) Inappropriateness of the price mechanism per se as a method of achieving development (recognition that LDC's development requires additional strategy, including direct transfer of resources).

Though the first meeting of the Working Party agreed upon broad guidelines for their future work, within the framework of the mandate given to them by the Sixth Meeting of the Common Market Council of Ministers, those would not be considered here but in later opportunities when those studies would be presented for comments by the Secretariat.

#### II - THE SECOND MEETING OF THE WORKING PARTY ON AMP

The Working Party met in Barbados from 24-27 November 1975, to decide on a proposal for a price fixing formula for AMP, to be submitted to the Council of Ministers in December. Besides the members of the Working Party - with the exception of the Member for Dominica - and some members of the Secretariat, additional technicians from the host country and myself, on behalf of ECLA/Port of Spain, in quality of observers, participated in the discussion.

The Secretariat presented at this occasion two very good papers, which facilitated enormously the task of the Party. The first one, entitled "The AMP, Agricultural Trade and Agricultural Prices in CARICOM", is an analysis, on the basis of the latest available scant information, of the nature, scope of the AMP as a trade instrument, with its objectives and limitations, within the framework of the new CARICOM on the one side, and on the other side, about the existing trading pattern functioning along the line of traditional markets for most products, except for very few new products.

The paper also underlined the existing constraints such as acute shipping capacity shortages, insufficient control of national agencies over production and marketing due to serious weakness in the administrative structure, inexistence or inadequacy of the statistical services of most Member States to the tasks of supplying the data required for the efficient operation of the Protocol and finally lack of impact of price levels on trade and trading patterns.

On the basis of the foregoing part the following approach was suggested by the paper;

- "(i) Trade, especially in products in which there already is a tendency to large surpluses, should be as free as possible, minimum restrictions being applied;
- (ii) Within a broad umbrella of protection under appropriate CET and/or a regime of quantitative restrictions, establish a relatively free pricing system;
- (iii) Constrain the "free" price system by appropriately determined ceiling and floor levels;
- (iv) Systematically close the Regional Market by the use of appropriate trade restrictions to imports from third countries for the Tourist industry;
- (v) Zone the Regional Market in such a way that LDC's may trade with each other especially to meet the demands of the Tourist industries;
- (vi) Establish a system of quotas and negotiated prices for a small but flexible list of products, especially those with potential for local production but are now being imported. This implies a GMS-type system but more rationally organized and closely monitored. This system constitutes a special measure for LDC's to trade with MDC's;

- (vii) Utilize CARDI and in particular CARDATS in the process of attacking at field level the technological and structural problems affecting the ability to produce. The role of CARDATS could be defined as that of ensuring ..
- (a) that serious production shortfalls in the present surplus crops do not occur and to overcome these setbacks;
  - (b) that the quota targets given for the new crops are met by the producing LDC at maximum efficiency.
- (viii) To achieve the goals set out at (vi) above, MDC's should systematically agree to purchase from LDC's the approved quotas at negotiated prices. The system should be so designed that the MDC's could accept extra seasonal surpluses and that the quotas could be adjusted on the basis of performance;
- (ix) That a Fund be established, financed from Regional sources - e.g. CET - or helped by national subventions, to finance the development of infrastructure in the agricultural sector in the LDC's. This fund can be used to help develop a system of feeder roads, irrigation projects, settlement schemes, the adaptation of technology, the procurement of technical assistance, etc. This idea recognizes that one of the implications of the Regional effort is that there must be some element of resource transfer from the MDC's to the LDC's. However, this transfer of resources should be concentrated as far as possible in areas that lead to increased productivity in the short as well as the long run".

The paper went on to give some consideration of certain elements of the strategy in certain details and in conclusion invited comments.



This paper reveals to be a good background paper for the examination of the proposed strategy for determining AMP prices contained in the main draft paper submitted for discussion: "A Framework for Determining AMP Prices". Using this last study as a working paper for the duration of the meeting, the Chairman organized the discussions on the substantive parts.

Discussions began on data available at the Secretariat. Despite reiterated requests of the Secretariat, up to the last AMP meeting (the 13th in Jamaica) most of the data were not forthcoming, and even for the actual exercise, cost of production data for only two countries were made available. Limited information on certain aspects of trade in AMP products exist. There was no data available either on total production or on actual performance under the instrument, after surpluses and deficits have been declared.

However, on the basis of available information, the Secretariat made some very good observations on the nature of trade under the AMP.

1) Degree of Specialization in Trade Patterns:

Recalling the ECLA Survey in 1974 of ECCM performance under the AMP, the paper mentioned an increase in volume of products traded intra-regionally from 5.1 million pounds in 1972 and 5.1 million in 1973 to 16.7 million pounds in 1975, using the AMP allocations for the year May 1975 to April 1976 as a basis for shipments that will actually take place. However, this considerable increase (over 300%) was due to trade in white potatoes, as Jamaica and Montserrat were expected to trade 8.3 million pounds of this product (73% of total increase in trade between 1973 and 1975/76).

The study reveals a high concentration of trade in a few commodities and between countries. On the buying side, two countries (Trinidad and Tobago and Barbados) purchase about 93% of all the goods traded under the AMP.

Trinidad buys "100% of carrots and sweet potatoes traded, in addition to 93% of white potatoes and 80% of plantains"; while "Barbados buys 79% of tomatoes traded and 100% of pineapples and oranges". On the selling side, "St. Vincent sells 100% of the sweet potatoes and 98% of carrots"; while "Jamaica sells 93% of white potatoes, Barbados 97% of onions and Dominica 55% of oranges". Even under the GMS the only new product of importance (peanuts) does not escape that same fate; the principal producer being St. Vincent.

2) Insignificant Roles of Most of the LDC's in AMP Trade;

What was advanced above leads to the obvious conclusion that trade under the AMP and GMS is critical to few LDC's. However, it is acknowledged that a considerable trade in AMP products, especially vegetables, both among LDC's and between LDC's and MDC's, actually take place outside the administrative channels established under the Protocol, this through schooners by higglers and hucksters.

3) Apparent tendency of the AMP, under present conditions, to act as a hindrance to trade than as an instrument for increasing trade in agricultural products regionally - observation made with special reference to trade in processed and semi-processed products and allowance of individual country to restrict importation of such by quantitative restrictions, unless deficits have been declared.

4) Serious consideration about securing greater efficiency under more direct methods such as those applied in the GMS to the so-called new crops such as carrots, onions, peanuts and white potatoes and also to newer products which could be of importance to particular LDC's.

5) Apparently, MDC's are not necessarily the lowest cost-producers in several of the products.

6) Significant differences among the territories in respect of additional cost of factors to farm gate money costs and also between estimated costs of production and existing FOB and AMP prices.

7) Apparently, there is no significant consistency in the relationships between price changes and production and trade from the AMP.

Examples:

<u>Product</u>	<u>Output offered for trade</u>	<u>Corresponding to</u>	<u>Prices</u>
White potatoes	considerable increase	-	Double
Carrots	more than double	-	Inc. of 30%
Onions	increase of 34%	-	Inc. of 67%
Sweet potatoes	fall of 11%	-	Inc. of 54%

### III - MAJOR ISSUES ABOUT A PRICE FORMULA

At the first meeting of the Working Party it was agreed that the price formula should be approached on the basis of a cost of production base. The Chairman brought again this question into discussion to explore possibilities of alternative bases. Lack of information at the Secretariat precluded the preparation of suitable comparative examples - only two (2) countries made their costs of production available, despite firm promises obtained at the 13th Meeting on AMP a few months ago.

The main points discussed at that meeting were the following:

- 1) Determination of the objectives of the price setting exercise (a single regional cost base for setting a single regional price for each crop).

The objectives are given by the Secretariat in what follows: to encourage the expansion of production and trade in agricultural commodities in the Less Developed Countries, particularly those which are presently major exporters of these products intra-regionally, or which may be heavily dependent on exports of these products.

- 2) Determination of standards of husbandry and management and levels of technology used in the region with all the difficulties that this entails.

This standardization refers as well for variable costs<sup>1/</sup> as for fixed costs.<sup>2/</sup> To arrive at an FOB price it is assumed that all charges from farm gate to ship would be added.

- 3) Appropriateness of a weighting system to arrive at a weighted average.
- 4) Use of percentage mark-ups or specific mark-ups.

During at least three days those points were discussed. With regard to the first issue, the meeting spent some time considering alternatives for the cost of production base because of the unavailability of the information and the non-uniformed system of calculation for each crop throughout the region. I suggested the use of wholesale prices series paid by marketing boards to farmers as the easiest available statistical information and one which reflects better the current internal situation of each crop and the play of Market forces. Over and above those prices could be added the cost of handling the products up to on board the ships, to arrive at a fairly good indicator of FOB prices. In conclusion I suggested that even if cost of production could be obtained, an effort should be made to retain wholesale price as check data. The meeting agreed on that last suggestion. As no other alternative was offered, the meeting continued its deliberations on the cost of production approach and entered into the technical problems posed by this attempt.

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<sup>1/</sup> Variable costs = land preparation - planting and propagation - fertilizing - weed control - pest and disease control - irrigation - transport to farm gate - harvesting - cleaning - grading - packing/bagging.

<sup>2/</sup> Fixed costs = Depreciation - rent of land.

1) Establishment of regional standards

The first problem discussed had to do with the establishment of regional standards for the variable costs or cash costs (labour inputs - indication of number of man-hours for each operation and for each crop - machinery services and periodicity - fertilizers, pesticides and quantity per crop) and also for fixed cost. (Machinery - equipment and buildings; Duration; cost at the beginning and cost of replacement - rent of land).

2) Application of percentage mark-ups

The party discussed some aspects of the above problems and even, at a time, was considering the possibility of applying to computed variable costs a percentage margin to take care of fixed cost and another one to cover gross profit margin (management income or fees, according to crops + risk factors + interest on working capital).

As was demonstrated with the proposal - A method of determining AMP prices, - using cost of production estimates supplied by 5 countries, to illustrate the case at the end of the study, it could be easily seen that such procedure is quite inappropriate. Because the use of percentages mark-ups on variable costs would imply that all the other costs vary in the same direction with the variable costs. Such approach would introduce an automaticity in the formula that would lead to a situation contrary to what is pursued here, that is to say, the promotion of efficiency. In that case fixed costs and profit margins would tend to be higher as variable costs increase, rewarding that way the farmers with highest variable costs and therefore relatively less efficient. This holds true for the use of specific mark-ups to determine level of fixed costs, handling charges and income.

3) A weighting system

The problem of a weighting system was discussed at length. Once the costs of production of all the producing countries of the region are determined, it would then be necessary to estimate a single cost base for the region. The elements suggested as possible weights in the paper are; total production or total commercial production - total exportable surpluses of each country or total exportable surpluses of LDC's. The paper, however, seems to lean in favour of exportable surpluses of the LDC's or total exportable surpluses around the region.

Because of the fact that none of those data are reliable enough, that in several cases only one or two countries are selling some products and furthermore that a certain bias would likely be introduced by the fact that costs of production of countries with largest outputs - not necessarily of highest efficiencies - would have a higher representation in the regional average, the idea of using a suitable weighting system was abandoned at the last moment. As the paper well put it "the higher the weights of the high cost producers, the closer the average cost approximate their case"; thus deviating the exercise from its main purpose, i.e. that of encouraging efficiency or productivity. The meeting then agreed on a price interval in-between the extremes of the series of costs of production of the countries of the area to be proposed by the Secretariat and discussed at AMP meetings; the average being within that interval.

4) Examination of a model of cost of production

The meeting went on to examine a model of cost of production form, the copy of which is presented in annex. Though some Working Party members confessed their incompetence in that matter, some very good observations were made. On my insistence, the first operation listed, land clearing, was suppressed because the whole operation of land clearing - felling of trees, stumping and the like - should be amortized on a very long period of time (25, 50 or 100 years) - and supported by all the crops or other farming operation, on the land; once it is done, it is forever.

Moreover, it would be difficult to assess and assign a certain percentage of the total amount to one crop. Only bush or heavy growth cutting, resulting on land let in fallow, could be considered as light land clearing and placed under the second group of operations; Land preparation. On the last page Interest on Working Capital (14) and Management 15(a) would be removed and will form part of gross income. Handling charges by the marketing boards would have a separate treatment and would be added to total cost to farmers to arrive at a FOB price.

The meeting then, on the basis of the simulated exercise shown at the end of the paper (page 17),recapitulated its findings and observations. Here are the conclusions at which it arrived;

- i) A group of technical experts, on the basis of their experience in the region, would fix the standards for the different items entering the variable costs, so that applicable regional standards could be arrived at. (Number of times for operations-duration-quantities of fertilizer or pesticides per crop, etc.) The cost would then vary country by country.
- ii) The same group would fix standards for items of the fixed cost; but as far as rent is concerned, it would be accounted for as is the case in each country.
- iii) Standards also to be fixed on a country per country basis for marketing and handling operations; for situation differs from country to country especially in transportation aspects.
- iv) Percentage mark-ups rejected because it would be at the advantage of higher cost producing countries and brings to the system an element of rigidity and encourages inefficiency.

- v) To arrive at FOB price other factors must be included above the basic elements of costs such as an income factor to take care of risks, service of management and profit.

As no arbitrary percentage mark-up could be justified on objective grounds, the Working Party drew on the experience of the Caribbean Development Bank (CDB). On the basis of a study or research carried out by that institution, EC\$1.600 per acre for 6 months were considered a reasonable income for a farmer on a 5-acre plot, over and above what he would earn if he and his family were the only workers on the farm, doing all the operations indicated under variable costs. Using this amount as the income factor or gross profit margin would complete the exercise of price fixing and the operation could be illustrated as follows;

For each country;

$$\text{Variable costs} + \text{Fixed Costs} + \text{Income} + \text{Handling} = \frac{\text{Total estimated}}{\text{FOB price}}$$

However, it was suggested that;

- i) Standards for cost of production should be revised every two or three years.
- ii) Governments supply estimates annually, and even during off-season period to take into account cost/price differentials.
- iii) Statistics on wholesale prices paid by Marketing Boards be compiled and supplied to the Secretariat regularly. Along with the CIF value of imports from third countries; those to be used as check data for AMP/FOB prices.

N.B. If in confronting the estimated FOB prices with the level of wholesale prices in the region substantial discrepancies appear, then CARICOM Secretariat would have to address itself to the Income per acre base for possible modification to bring the FOB price closer to reality, and more in line with regional average wholesale prices.



Conclusion

The Working Party meeting in Barbados made a good and fruitful exercise, partly because it is more effective to work with a small group of technicians and also because two (2) fairly good working papers were submitted by the Secretariat. This had helped considerably to orientate the discussions on not-an-easy problem; a method of price fixing. Subjective elements have been eliminated in the mechanics of cost of production estimates (by considering the fixing of regional standards for variable costs, and to a certain extent, for fixed costs) as well as the rigidity or automaticity of percentage mark-ups to arrive at unit cost and also at unit price for each country of the region. Moreover, in the absence of a better objective basis, it was suggested and agreed upon an income criterion to farm production in the form of a lump sum amount per acre, judged by a regional institution as reasonable, instead of a percentage mark-up. Though the search for a suitable weighting system in order to arrive at a regional FOB price did not yield satisfactory result, the set of estimated national FOB prices constitute a range from which an interval could be chosen and within which the bargaining of an agreed price could take place. This even allows the possibility of fixing a minimum and a maximum price to take care of periods of in-season and off-season. Anyway the choice of an interval leads to the election of a point within it as average regional price which carries implicitly an element of incentive because that price tends to be fixed at a level closer to the highest FOB price; therefore remunerating the most efficient farmers by giving them an AMP price higher than their estimated calculated FOB price.



COST OF PRODUCTION (PER ACRE)

CROP: \_\_\_\_\_ PLANT POPULATION: \_\_\_\_\_  
DURATION OF CROP(wks/mths): \_\_\_\_\_ MARKETABLE YIELD  
PER ACRE: \_\_\_\_\_  
METHOD OF CULTIVATION: (mechanised, semi-mechanised,  
draught animal, hand)

OPERATION	FREQUENCY	RATE(\$)	TOTAL COSTS
1. <u>Land Clearing</u>			
(a) <u>Labour</u>			
(b) <u>Machinery</u>			
(c) <u>Materials</u>			
(d) _____			
2. <u>Land Preparation</u>			
(a) <u>Labour for</u>			
(i) <u>Removal of Stones</u>			
(ii) <u>Ploughing- Sub-soiling</u>			
(iii) <u>Rolling</u>			
(iv) <u>Harrowing</u>			
(v) <u>Rotavating</u>			
(vi) <u>Levelling</u>			
(b) <u>Machinery</u>			
(c) <u>Materials</u>			
(d) _____			
3. <u>Planting and Propagation</u>			
(a) <u>Labour</u>			
(b) <u>Seed</u>			
(c) <u>Materials (stakes, etc.)</u>			
(d) _____			



OPERATION	FREQUENCY	RATE(\$)	TOTAL COSTS
Brought forward			
4. <u>Fertilizing</u>			
(a) <u>Labour</u>			
(b) <u>Fertilizer</u>			
(i) <u>Complete</u>			
(ii) <u>Sulphate/Ammonia</u>			
(iii) _____			
(iv) _____			
(c) _____			
5. <u>Weed Control</u>			
(a) <u>Labour</u>			
(b) <u>Weedicides</u>			
(i) <u>Dymid</u>			
(ii) <u>Grammoxone and Reglone</u>			
(iii) _____			
(c) <u>Materials</u>			
(d) _____			
6. <u>Pest and Disease Control</u>			
(a) <u>Labour</u>			
(b) <u>Fungicides</u>			
(i) _____			
(ii) _____			
(iii) _____			
(c) <u>Insecticides</u>			
(i) _____			
(ii) _____			
(iii) _____			
(d) <u>Materials</u>			
(e) _____			



OPERATION	FREQUENCY	RATE(\$)	TOTAL COSTS
Brought forward			
7. <u>Irrigation</u>			
(a) <u>Labour</u>			
(b) <u>Water</u>			
(c) <u>Equipment</u>			
(d) <u>Power</u>			
8. <u>Harvesting</u>			
(a) <u>Labour</u>			
(b) <u>Machinery</u>			
(c) _____			
9. <u>Cleaning</u>			
(a) <u>Labour</u>			
(b) <u>Materials</u>			
(i) _____			
(ii) _____			
(c) _____			
10. <u>Grading</u>			
(a) <u>Labour</u>			
(b) <u>Materials (Crates)</u>			
(c) _____			
11. <u>Packing/Bagging</u>			
(a) <u>Labour</u>			
(b) <u>Materials</u>			
(c) _____			
12. <u>Transport to Farm Gate</u>			
(a) <u>Labour</u>			
(b) _____			
(c) _____			





OPERATION	FREQUENCY	RATE(\$)	TOTAL COSTS
Brought forward			
13. <u>Depreciation</u> (if not included above)			
(a) <u>Tractor</u>			
(b) <u>Ploughs, etc.</u>			
(c) <u>Other Equipment</u>			
(d) _____			
(e) _____			
14. <u>Interest on Working Capital</u>			
15. <u>Rent of Land, etc.</u>			
15(a) <u>Management</u>			
16. <u>Total Cost</u>			
<u>Handling Charges</u>			
Cold Storage			
Commission			

