

# A Co-operate Plan for Low Income Group Housing

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## Introduction

This paper outlines a co-operate plan to assist prospective house builders in the low income group, to build their homes with State participation. In this context, State participation does not refer to Aided Self Help Housing, which has been put into operation in Sri Lanka in numerous projects.

The Co-operate Plan envisages a major role to be played by the State in producing a standardised planning system and initiating a 'Micro Building Industry', which in combination will put into operation this planning system, so as to assist the low income private house builder to construct his home expeditiously and at minimum cost.

Ideally this method will apply to homes which fall within the cost region of Rs. 40,00/- to 100,000/-

## First Steps

Once a family in the low income group has acquired sufficient finances and decides to build a new house, the home builder's first task is to investigate the cheapest way of getting the project started. With limited finances, he will not be able to commission architects, while at the same time, being a once in a life time project, he will want to get the best for his money.

Standardized house plans will play a major role at this stage. This concept is not new in Sri Lanka, (but has been used only in large scale housing projects). To put into operation this co-operate plan, the following changes are proposed for the production of these plans.

**Proposed Format for preparation of Standardized Plans**

1. The State should compile a wide range of standardized plans (area wise and cost wise) accordingly to the following recommendations and make them available through out the Island, ideally through the local Grama Sevaka or other appropriate agent. This availability should be published through the news media.
2. The plans should be fully dimensioned and on a presentation standard as required by the local authorities for the purpose of planning approval and should include the following information.
  - 2.1 Ground Plan
  - 2.2 Space for site/location plans
  - 2.3 Sections
  - 2.4 Elevations
  - 2.5 Finishes
  - 2.6 Space for owners name/address etc. for Local Authority application.
  - 2.7 Quantity of Foundation with recommended cost
  - 2.8 Quantity of Walls and Floor with recommended cost
  - 2.9 Quantity of Roof and Ceiling with recommended cost
  - 2.10 Quantity of Doors, Windows and fittings with recommended cost
  - 2.11 Quantity of Services (electrical and plumbing) with recommended cost

The above costing should include the finishes, and be presented in a simple format for the lay man to understand. (See Appendix I)

*Appendix I*

**Proposed format for quantities and cost**

<i>Item</i>	<i>Description</i>	<i>Total Quantity</i>	<i>Recommended Cost</i>
(1) Foundation			
(2) Walls and Floor			
(3) Roof and Ceiling			
(4) Doors and Windows			
(5) Services and Fittings			
<b>Total cost</b>			



APPENDIX II

## 75,000 youths to be trained

Training facilities for 75,000 young men and women in various technical fields in house construction will be available early next year throughout the country.

This is in response to the second agreement signed with the World Bank by the Institute for Construction Training and Development (ICTAD). The ICTAD is a new organisation set up by the Ministry of Local Government Housing and Construction on the initiative of Prime Minister R. Premadasa.

Reference : Sunday Observer 28.12.86

The above trained personnel with state assistance and encouragement will be potential builders for the Micro Building Industry.

Earlier about 35,000 young men and women were trained with the assistance of the World Bank in masonry, carpentry, electrical wiring, steel fixing, barbending and other trades connected to house building.

On the success of this program the World Bank has extended its assistance program in this field by signing the second agreement. A spokesman for the Ministry said the World Bank was happy that this program was conducted successfully in places available without going in for new buildings.

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## Roof for the arts and the vocations

By Norton Weerasinghe

President J. R. Jayewardene and Prime Minister R. Premadasa opened 'Savsiripaya', the vocational and arts centre at Wijerama Mawatha, Colombo yesterday.

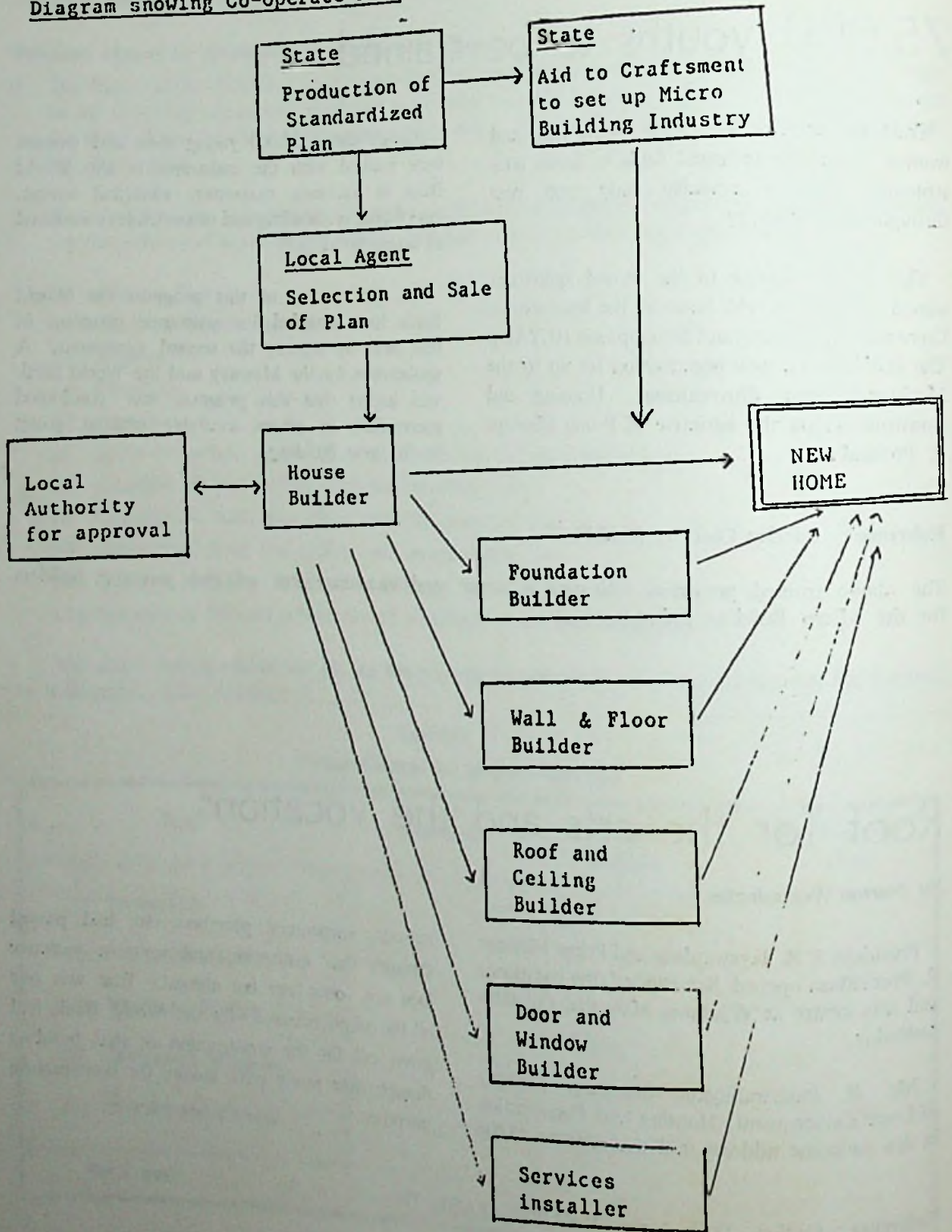
Mr. R. Paskaralingam, Secretary, Ministry of Local Government, Housing and Construction in his welcome address said that already 40,000

masons, carpenters, plumbers etc. had passed through that institution and were in lucrative jobs not only here but abroad. That was one of the main reasons why the World Bank had given aid for the construction of that building though they rarely gave money for construction purposes.

Reference : Ceylon Daily News 21.09.1987. PAGE TEN

APPENDIX III

Diagram showing Co-operate Plan





Items (2.7) to (2.11) are of utmost importance for the suggested co-operate plan. These plans should be published every year with updated rates for the building costs.

### **Inception of Building Operations**

Having selected a suitable house plan and purchased it, the home builder can now obtain building approval by sending the selected plan, with the necessary information filled in and the required number of copies to the local planning authority. Therefore the plans should be in a format that could be sent directly to the planning authority.

Once the planning permission is obtained he has the problem of finding a contractor to build his home. It is at this point that the main feature of this co-operate plan, outlined below as the 'micro building industry' comes into operation and requires participation from the State and the building industry.

### **The Micro Building Industry**

**It is suggested that the State provides technical know-how, incentives and loans for small scale building craftsmen (micro builders) to set up the following individual building services, on a specialised basis throughout the cities and villages.**

1. Foundation construction
2. Wall and Floor construction
3. Roof and Ceiling construction
4. Door and Window construction
5. Services installation

The Government has been training young men and women in the past to do this type of work and these trained personnel should be given the opportunity to form the back-bone of the micro building industry. (See Appendix II)

**Each organisation should be specialised to do only one task and nothing else and they should be encouraged to set up offices in the local 'bazaar,'** where the prospective home builder could meet them with the approved plan and get a quotation for that specialisation over the counter. (See Appendix III) (eg. The home builder will get a quotation for construction of the foundation from the foundation specialist. He will then go to the walls and floor specialist for a quotation for that part of the building.

Since the plans are standardised and since the specialist organisations are already familiar with these plans and their components, they should be able to give a quotation instantly and the prospective home builder, who has the recommended cost with him as indicated in the plans, could decide to place an order for that part of the building (say construction of foundation up to D.P.C. level) with that micro builder.

Each specialist will then carry out his work at the site independantly of one another, but in the order as specified above. Finishes such as plastering and painting could be kept as a separate contract to the last, or some of it done by the house owner on a do-it-yourself basis.

Each micro builder, since he is dealing with a specific section of the building will have materials, which he may buy in bulk; labour, which he may provide himself and components and fitting, which he may fabricate or stock in bulk, readily available and at a comparatively cheaper price. A cost reduction may also be made by encouraging competition among the micro builders and by eliminating the middle man,

the so called "main contractor", for these low income group house building. At the same time the micro building industry gives an opportunity for skilled craftsmen to set up specialised, small trades through-out the country. These skilled building craftsmen can now work for themselves for their own enterprises, instead of working for a main contractor who usually employs them, for their skills, on a job by job basis. Also the setting up of the micro building industries will create employment for thousands of skilled, semi-skilled and unskilled workers in every town and village throughout the country.

#### Important Points

The following points are of utmost importance for the success of this co-operate plan.

1. This Co-operate plan should apply to houses that fall between the cost region of Rs. 40,000/- to 100,000/-.
2. The production of standardized House plans should be undertaken by the State and all the building components should be standardized.
3. Building components should be standardized throughout the whole range of different plans.
4. The house plans should be on the recommended format and the costing should be realistic.
5. Sets of plans should be readily available throughout the country, with facilities for selecting them, preferably on a mail order system.
6. The Local Authorities should give planning approval without posing technical queries from the prospective house builders, provided that the plans are not altered by the house builder.
7. The State should initiate the "micro building industry".
8. A micro builder should be allowed to do the work of only one specialisation.
9. The state should provide a service by doing spot-checks for quality of construction of these houses. The Owner may also request such a check.

#### Concepts

The above proposal is based on the following concepts and should be kept in mind when organising the administrative structure to implement the co-operate plan:

1. The concept of standardization and pre-fabrication, but without going into large scale centralised mass production is used. e.g. Door frames will be made to 2 or 3 standard sizes, but fabricated locally with the materials available in that locality. Therefore the mass production and prefabrication will be handled by the specialist in the area, but to a standard which will apply countrywide.
2. The concept of cost reduction through mass production and standardization, which apply to all commercially marketed products.
3. The building operation is divided into sections which can be managed by different specialists.



4. The availability of the sizes of the standard components to the micro builder so that he can stock and cost the components required for his specialised trade before hand and have it ready for the house builder on request.
5. The principle of using man-power and expertise at a multidisciplinary level combining the resources of a number of state departments through their ministries.
6. The plan combines a number of principles which have already been tried out, but when these are unified, the plan will work towards a common goal.
7. The home builder gets an incentive to build, and an opportunity of selecting a house to suit his finances and family requirements, because of the readily available plans and building services locally. He will also have the satisfaction and pride of ownership by his anticipation in the building operation.