Guideline for compilation of
Building Cost Index Numbers

A building cost Index series can show the trends in the building construction costs at specified centre over a period of time. The building construction costs, however, vary with the type of construction, design, region etc. Therefore, in order to study the variations in building construction costs in the country, it is necessary to compile the building cost index numbers for well-demarcated regions within which the design, construction techniques and materials used are uniformly similar. Also different series will have to be maintained for different types of buildings such as residential buildings, institutional buildings, commercial buildings etc.

2. The State Statistical Bureau may compile these indices for the regions falling in their States on a quarterly basis. As a first step, the index numbers of buildings costs for residential constructions may be compiled. These may be compiled for one principal town in each State-preferably the State Capital City.

3. The following are the broad guidelines to be followed in the compilation of these index numbers.

(i) The index may relate to a typical, popular, common type of residential structure constructed in the public sector under the Low Income Group Housing Scheme by the State Housing Board or under the scheme for the low paid Government employees by the State Public Works Department.

(ii) The year 1999-2000 may be taken as the base year.

(iii) The index may consist of three groups, i. e., material, labour and other charges. Bricks, sand, aggregate, cement, iron and steel, timber, sanitary and water supply fittings and electrical fittings are to be included in the material group. Under 'labour' the wages for mason, carpenter and unskilled labour may be included while 'other charges' may include Architects fee, corporation fee, contingency etc.

(iv) Retail prices inclusive of taxes, transport charges (inputed), if necessary, are to be used for the compilation of the index.

(v) Weights are to be assigned to each item included in the index in proportion of their expenditure to the total cost.

(vi) The index numbers may be compiled using the weighted Arithmetic Mean Method.

INDEX NUMBERS OF BUILDING CONSTRUCTION COSTS: (Input Prices method).

The price of a structure is made of mainly (a) the cost of materials and (b) the cost of labour. A study of the relative increase or decrease in the cost of these two components during a certain period gives an idea of the trend of construction costs. The cumulative effect of the changes in prices of the component items in the construction of a building over time is more important and it is this cumulative effect which is studied through the building cost index. Charges in the price of the constituent items are unlikely to be exactly similar and they will vary for different types of buildings; also the proportion of total costs represented by the constituent items is likely to vary. It becomes necessary, therefore, to have separate series of building cost index numbers for different types of building construction, such as residential building of re-inforced concrete with specific floor space etc. for important area.

The index has to have a base with which the change in price level during any subsequent period compared. The weighted arithmetic average method is used for the computation of the index. For each variety of material/labour the price relative is computed by dividing the currant rate by the corresponding base period rate. The weighted arithmetic average of the price relatives of the varieties is taken as the material/labour index. The weighted arithmetic average of these material and labour indices is the general building cost index.

Symbolically, Building material/labour index

$$\frac{\sum_{j} ij \; Pj}{\sum_{j} wij}$$

Where Pj are the price relative, wij are the corresponding weights and j varies from l to n, n being the number of different grades of the commodity variety and the general building cost index

$$I = \frac{\sum wi \; Ii}{\sum wi}$$

Where I i are the material/labour indices and w e are the corresponding weight.

The weighting diagram is based on the proportion of expenditure incurred on each item in relation to the total construction costs in building construction in the base years.

BUILDING CONSTRUCTION INDEX NUMBERS
FOR THE QUARTER ENDED

STATE: **CENTER:**
District: **Base Year: 1999-2000=100**

ITEM	WEIGHTAGE (Proportional to total Cost)	INDEX NUMBERS FOR			Variation (in %) Compared to	
		Corresponding quarter in previous year)	Previous Quarter	Current Quarter	Corresponding quarter in previous year)	Previous Quarter
BUILDING MATERIAL COST						
Brick & Tiles Product						
Sand, Stone & Other Product						
Cement & Lime Product						
Timber & Other Woods						
Iron & Steel Products						
Ancillary Materials						
Electrical Fitting						
Water Supply & Sanitary						
LABOUR COST						
Skilled						
Unskilled						
OTHER CHARGES						
Mixing Charges						
Centering Charges						
E.B. Service Connection charges						
Contingencies						
Supervision Charges						
INDEX NUMBERS						
BUILDING MATERIAL COST						
LABOUR COST						
OTHER CHARGES						
BUILDING COST INDEX						