

REPORTER

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Housing in Karnataka: Present Scenario & Likely Demand by 2011

STEM has completed a considerable number of Research & Consultancy (R&C) assignments by way of forecasts on housing & building materials demand and trends. Some recent examples are the studies pertaining to (i) Housing & Key Building Materials in India, (ii) Corporate Plan for Housing & Land Development Programme (HALDEP) in Karnataka and (iii) types of houses and indigenous building technologies adopted in the rural areas of Orissa & Punjab. These studies have gone a long way in complementing the governmental initiatives in the formulation of housing policies and programmes. The Task Force on Housing constituted by the Govt of Karnataka (Jan-Nov 2000) had suggested that the issue of housing be looked into at various levels such as city, town, village, etc., rather than at a single level. Further, the Task Force had also underscored the need for creating a database on housing as a prerequisite for the evolution of a pragmatic housing programme in the state. As a sequel, in June 2001, the Karnataka Housing Board (KHB) commissioned STEM to undertake a field survey. The survey, completed over the next five months, covered an overall sample of 8300 households spread over 27 districts and generated vital data on likely demand for housing in the state by the year 2011. Based on the findings from the survey, STEM also estimated the financial & funding requirements of different income groups in the state's rural and urban areas.

Dear friend,

STEM has completed a substantial number of Research & Consultancy (R&C) studies by way of forecasts, especially on housing & building materials demand and trends. This issue of STEM Reporter deals with an exercise undertaken by STEM in Karnataka that generated vital data on effective demand for housing and estimated the financial & funding requirements of different income groups in the state's rural and urban areas. We wish to take this opportunity to put on record our deepest gratitude to the Karnataka Housing Board (KHB) for commissioning this study and extending all-out support for its successful completion.



Yours truly,

B. Bhaskara Rao
Executive Director

May 2004

OBJECTIVE

The overall objective of the study was to assess the existing condition of housing in Karnataka and, then, to forecast the likely trends in demand for housing by the year 2011 as also to estimate the financial & funding requirements of different income groups. The purpose of the study was to contribute to the formulation of a housing development plan for Karnataka.

METHODOLOGY

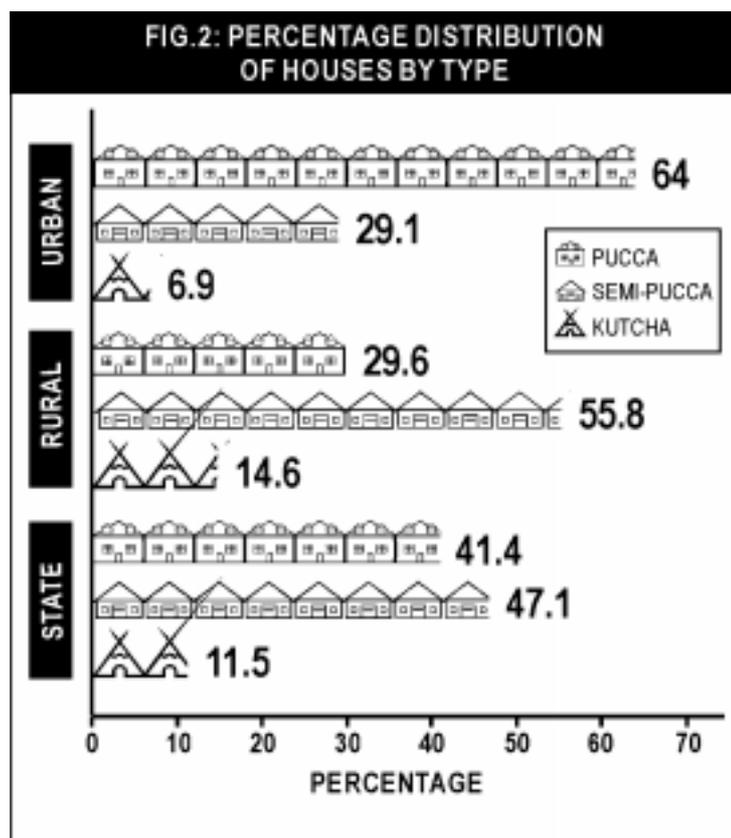
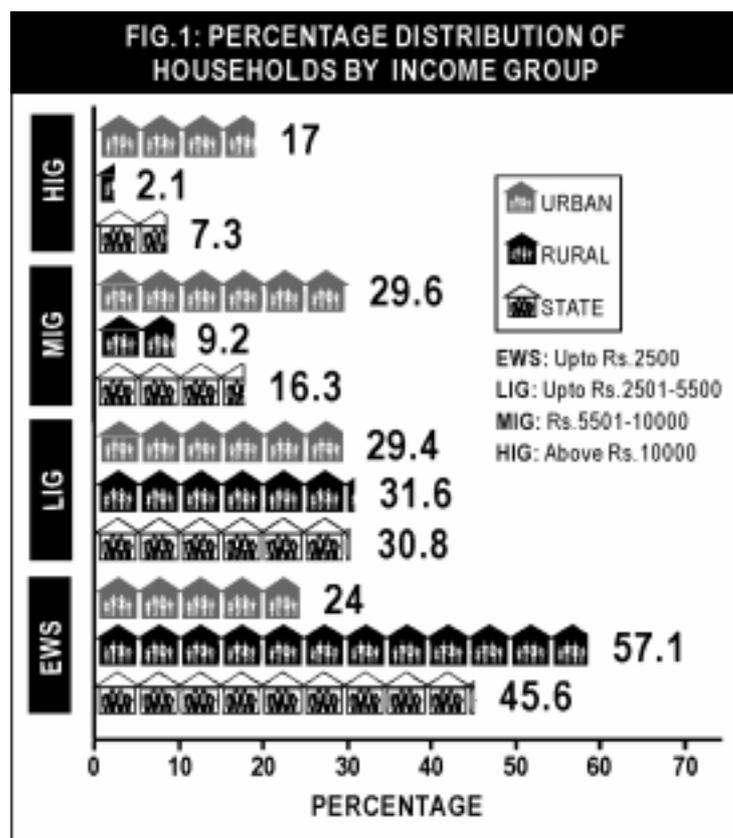
The study was essentially based on a field survey, covering an overall sample of 8300 households spread over the urban & rural areas of all the 27 districts of Karnataka. A multi-stage sampling design was adopted. The study gave special attention to six City Corporation areas, namely, Bangalore, Belgaum, Gulbarga, Hubli-Dharwar, Mangalore & Mysore.

Classification of Households

Sampled households were categorized broadly into four groups according to their average monthly income (see Fig.1 on next page). This ensured collection of information on parameters of housing according to the economic level of households.

Classification of Houses by Wall & Roof

For the purpose of the survey, STEM classified houses into 'pucca', 'semi-pucca' and



'kutcha' (see Fig.2 above). The classification was made as follows, based on local conditions and materials used for the construction of roofs and walls:

- **Pucca:** A house with both wall and roof constructed with 'permanent' material.
- **Semi-pucca:** A house with either the wall or roof constructed with 'temporary' material.
- **Kutcha:** A house with both the wall and roof built with 'temporary' material.

Classification of Wall/ Roof by Material

The materials used for roofs were identified as 'permanent' or 'temporary' on the following lines: (a) *Permanent* - Tiles, Reinforced Concrete Cement (RCC) and stone; and (b) *Temporary* - Grass/ palm, CGI/ Asbestos Corrugated Cement (ACC) and timber. The materials used for walls were distinguished as 'permanent' or 'temporary' in the following manner: (a) *Permanent* - Brick & cement, concrete hollow blocks and stone; and (b) *Temporary* - Brick & mud, mud & bamboo and stabilized blocks.

FINDINGS

The findings from the survey yielded interesting insights into Karnataka's housing scenario (see Chart 3 on page 4) and

helped STEM build up a knowledge base on:

- quality of housing & amenities;
- status of functional area;
- age & physical structure of houses;
- perceptions of households on (a) housing problems, (b) housing finance, (c) their capacity for repaying housing loan, (d) kind of house upgradation they seek and (e) type of house they wish to own; and
- households' awareness of new building technologies and their inclination to adopt them.

FORECAST OF HOUSING DEMAND BY 2011

STEM made a forecast of estimates of housing stock and land requirements by the year 2011, on the basis of a study on trends in population growth in the state over the past four decades (see Chart 1 on page 3). The housing needs scenario between 2001 and 2011 were computed on the different assumptions for housing stock at the base year, annual housing completions required, housing stock to be replaced, and housing upgradation needs for qualitative improvement. The minimum needs in the urban areas was thus estimated at around 12.3 lakh and rural areas at around 12 lakh. While the minimum housing needs of urban and rural areas were nearly equal, the maximum needs varied widely. For computation of land requirements and financial needs,

TABLE 1: HOUSING INDICATORS

INDICATOR	B'LORE METRO POLIS	FIVE MUNICIPAL CORPORATIONS					KARNATAKA		
		Belgau	Gulbarg	Hubli-Dharwa	Mangalor	Mysor	Rura	Urba	Stat
Average floor area (sq. ft)	680	524	473	486	643	611	448	556	505
Unit cost of house (Rs.lakh)	9.6	4.5	3.4	3.3	6.6	6	0.6	4.6	1.3
Average rooms per house	2.9	2.8	2.1	1.9	2.8	2.6	1.9	2.4	2
Percentage of									

TABLE 2: EFFECTIVE HOUSING DEMAND BY 2011

COMPONENT	B'LORE METRO-POLIS	FIVE MUNICIPAL CORPORATIONS					KARNATAKA (in lakhs)		
		Belgau	Gulbarg	Hubli-Dharwa	Mangalor	Mysor	Urba	Rura	State
Vacancy rate	11055	656	670	1461	691	1321	1.40	0.66	2.06
To be replaced	22110	3820	3351	7304	3465	6603	1.75	6.62	8.37
Desire for home by owners and tenants	2.60 lakh	28907	23112	63696	18794	49997	10.93	25.81	36.74
Overall	2.93 lakh	33383	27133	72461	22950	57921	14.08	33.09	47.17

TABLE 3: ANNUAL TARGETS & FINANCIAL OUTLAY REQUIREMENTS: 2001-2011

COMPONE	B'LORE METRO-POLIS	FIVE MUNICIPL CORPORATIONS					KARNATAKA		
		Belgau	Gulbarg	Hubli-Dharwa	Mangalor	Mysore	Rura	Urban	State
Annual housing completio required	22300	1400	2000	2700	1500	3500	1.23 lakh	1.20 lakh	2.43 lakh
Investment on housing (Rs. crore)	2015.50 #	51.80 #	68.60 #	70.80 #	76.40 #	196.90 #	1636	3440	5076
Investment on key building materials (Rs. crore)	1177*	15.10	12.50	45	26	47.20	2511	902	3413
Investment on labour (Rs. crore)	435.30*	11.50	13.20	16.60	16.30	38	929	442	1371
Investment on land (Rs. crore)	379*	31	35.80	19.10	44	102.70	1636	385	2021

CHART 1: TRENDS IN POPULATION GROWTH

The study took into account the data on size of population as per the four Censuses between 1971 and 2001, percentage decadal growth rates in population & number of residential houses, and households & their sizes. As for the population projections for 2011, the Planning Commission's figures were followed.

The analysis indicated that, even though the urban population had been increasing, the trend in growth rate from decade to decade had been experiencing a decline. Consequently, for the decade ending 2011, it would be around 25 per cent. It was, therefore, expected that the percentage of urban population to the total population would steadily increase from 24 per cent in 1971 to nearly 38 per cent in 2011. Correspondingly, the number of households and residential houses was also found to have increased over the decades. However, there was a declining trend in the household size over the decades. It was expected to be of the order of less than five by 2011.

Similar changes were also noticed in the rural sector. This could result in reduction of disparities between urban and rural areas. The size of households and the persons per house could, therefore, become the same in both urban and rural areas in the days ahead.

CHART 2: SOME KEY FACTORS INFLUENCING POLICY FORMULATION

- Decline in household size
- Household income
- Dependence on housing loan
- Demand for space & amenities
- Quality of house construction and sustainability of building materials
- Desire for a second house
- Housing as a highly personalised sector
- Role of public sector HDAs
- Minimising or restricting subsidy level
- Fixing varied rates of interest on loan amounts
- Pooling funds for housing the poor & deprived
- Recognition of the concept of Housing as House(Shelter)+Basic Amenities+ Infrastructure (Social & Economic)

CHART 3: GLIMPSES OF KARNATAKA'S HOUSING SCENARIO

Quality Housing & Amenities

- Urban dweller lives in an area approximately 1.2 times more than that of the rural counterpart.
- An average LIG/ MIG household has at least two rooms.
- Hand pumps & public taps are the main water sources for about two-thirds of the households.
- Toilets are available to more than two-thirds of the urban households and little more than one-third of all households.
- Almost all households have bathroom facilities.
- Less than half of the households have proper drainage facility.
- Electricity is available to a large majority of the households.

Status of Functional Area

- In most households specific space is allotted for the purpose of sleeping, cooking, eating, bathing & storage. Majority of houses have separate space for worship. In some cases, space allotted for worship, eating, storage & drying clothes was shared for multiple activities.
- All functional areas have roof covering, proper lights & medium mode of ventilation.

Age of Houses

- More than two-thirds (66 per cent) of all houses are around 20 years old and only 7 per cent are constructed within the last six years.

Housing Problems

- Dampness/ leakage in the buildings is a major problem for a large number of respondents.
- There is a dearth of skilled labour for construction and maintenance in rural areas.

Housing Finance

- There is more awareness about housing finance among the urban respondents.
- Finance is identified as the main hurdle in housing by a large number of rural & urban respondents.
- About one-fifth of all the respondents have no alternative except going in for a housing loan.

Loan Repayment Capacity

- The average monthly loan repayment capacity among urban households ranges from Rs.800 to 3400.
- The average monthly loan repayment capacity among rural households ranges from Rs.800 to 2600.

Upgradation

- Less than one-third of rural respondents wish to upgrade their houses in terms of roofing, flooring, etc.
- The proportion of urban respondents wanting to go in for similar upgradation is still smaller

Ownership

- A little more than 50 per cent of all respondents want to possess a house within three years. Around 11 per cent want to own a house within five years.
- An average urban household desirous of owning a plot and house is prepared to pay 2.5 times more than the rural household.

Awareness of New Technologies

- Urban respondents, particularly the higher income groups among them, are more open to accepting new material & technology.
- Among the rural respondents, especially those belonging to lower economic strata, the willingness to accept new technology is much lower

the minimum housing needs were considered as the base figures. The prevailing housing indicators and housing needs, annual targets & financial outlay requirements arrived at are set out in **Tables 1, 2& 3** on the previous page.

Two major kinds of housing needs were envisaged towards arriving at the forecast: (a) Spill-over or Effective Demand and (b) Additional Demand. The **Spill-over or Effective Demand** was worked out taking the following four aspects into account: (a) housing shortage, (b) vacancy rate, (c) houses to be replaced and (d) demand from house owners & tenants (see **Table 2**). This type of demand was estimated to be 47 lakh units in all, 14 lakh in urban areas and 33 lakh in rural areas. The **Additional Demand** was worked out taking into consideration the new units of housing required due to population growth. It was thus estimated that a minimum of 24 lakh new housing units would be required to accommodate the additional population. The **Additional Land** required to meet the additional housing demand was also worked

out. It was estimated at around 25000 hectares in all - 14000 hectares in the urban and 11000 hectares in the rural areas. The **Annual Financial Outlay** on house construction (see **Table 3**) was estimated at Rs.5076 crore, of which the urban sector would receive Rs.3440 crore. The corresponding investment on land was worked out at Rs.2021 crore, of which the urban sector would get Rs.1,636 crore.

BOTTOM LINE

The findings from the survey indicated that, while planning for housing policies, it is imperative to consider the following two major dimensions of housing:

- Type & Level of Housing
- Affordability & Income Levels

Some key factors influencing Housing Policy Formulation are cited in **Chart 2** on the previous page. ■

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