INDICATORS PROGRAMME

Monitoring the Shelter Sector

Volume 3.
HOUSING INDICATORS REVIEW
The Survey Instrument

Preliminary Worksheet
October 1994.

Country:...

Date:……………………………………

CONTENTS

LIST OF INDICATORS

Key indicators
Indicator D4: Woman headed households
Indicator D5: Average household size (persons)
Indicator D6: Household formation rate
Indicator D7: Household income distribution
Indicator D9: Housing tenure type
Indicator H1: House price to income ratio
Indicator H2: House rent to income ratio.
Indicator H3: Floor area per person.
Indicator H4: Permanent structures.
Indicator H5: Housing in compliance.
Indicator H6: Land development multiplier
Indicator H7: Infrastructure expenditure
Indicator H8: Mortgage to credit ratio
Indicator H9: Housing production.
Indicator H10: Housing investment

Extensive indicators

Indicator DA3: Household type	Indicator HA28: Mortgage-to-deposit difference
Indicator DA4: Household expenditures	Indicator HA29: Arrears rate
Indicator DA5: Dwelling type	Indicator HA30: Mortgage loans for women
	Indicator HA31: Construction cost.
Indicator HA1: Mortgage affordability	Indicator HA32: Construction time.
Indicator HA2: Excessive housing expenditure	Indicator HA33: On-site productivity.
Indicator HA3: Economic share of housing	Indicator HA34: Industry concentration.
Indicator HA4: Transaction costs	Indicator HA35: Employment.
Indicator HA5: House price appreciation.	Indicator HA36: Wage labour.
Indicator HA6: Overcrowding.	Indicator HA37: Effective taxation rate by tenure
Indicator HA7: Households per dwelling.	Indicator HA38: Nett housing outlays by
Indicator HA8: Inadequate housing.	government.
Indicator HA9: Indoor plumbing.	Indicator HA39: Property tax rate.
Indicator HA10: Squatter housing	Indicator HA40: Public housing stock
Indicator HA11: Homelessness.	Indicator HA41: Privatised public stock.
Indicator HA12: Owner occupancy (by sex)	Indicator HA42: Public housing production.
Indicator HA13: Vacant dwellings.	Indicator HA43: Social rent to income.
Indicator HA14: Rural water/electricity connection.	Indicator HA44: Waiting time.
Indicator HA15: Permanent rural housing.	Indicator HA45: Operating subsidies.
Indicator HA16: Rural home ownership.	Indicator HA46: Administrative costs.
Indicator HA17: Rural house price to income	Indicator HA47: Tenant management.
Indicator HA18: Land availability.	Indicator HA48: Rent control.
Indicator HA19: Planning permission multiplier	Indicator HA49: Rental eviction delay.
Indicator HA20: Formal land transactions.	Indicator HA50: Lease security.
Indicator HA21: Development time.	Indicator HA51: Evictions.
Indicator HA22: Cost recovery.	Indicator HA52: Mortgage foreclosures.
Indicator HA23: Minimum lot size.	Indicator HA53: Female property rights.
Indicator HA24: Land development controls	
Indicator HA25: Credit to value ratio	Indicator HB1: Land price gradient:
Indicator HA26: Housing loans	Indicator HB2: Housing starts
Indicator HA27: Mortgage-to-prime difference	

INTRODUCTION

This instrument, entitled *Housing Indicators Review*, is one of three documents forming part of a monitoring package for cities. Together with *Part 1: Introduction* and *Part II: Urban Indicators Review,* this document provides a tool for monitoring and reviewing the condition of cities and the shelter sector, providing benchmarks for the development of urban and shelter conditions and policy over space and over time.

The indicators in this report are also intended to act as a major input to the preparation of country strategy plans and reports for the Habitat II Conference (City Summit) to be held in Istanbul in June 1996. The indicators permit a comprehensive picture to be gained of the housing and shelter sectors in cities or countries, which possibly together with other indicators which countries may wish to use, will provide a quantitative, comparative base for shelter sector conditions, and will show progress towards achieving urban objectives.

Three different levels of indicators are included in the instrument:

1. **key indicators**, comprising indicators which are both important for policy and relatively easy to collect. These key indicators, which have been endorsed by the Commission for Human Settlements, form the backbone of the *Housing Indicators Review*, and all countries are strongly urged to provide data on these indicators <u>for the urban and rural areas as a whole.</u> If they cannot be collected for the whole country, then they should be collected for at least one city, and a sample rural area. This is the absolute minimum request for cooperation, and countries are requested to collect or estimate all the key indicators. Pages with key indicators are *yellow.*

2. **extensive indicators**, which give a fuller description of the shelter sector. These indicators are either:
- important but more difficult to collect than key indicators;
- alternates which give a fuller picture;
- indicators that are important in many but not all countries

   A comparable level of response was attempted and completed successfully by the *UNCHS/World Bank Housing Indicators Program* in 1991-92 in major cities in fifty-three countries.

   It is expected that most countries will respond voluntarily at this level, at the national or urban/rural level, or for one or more cities, possibly for cities of different sizes.

3. **intensive indicators**, the third level response, is aimed largely, but not exclusively, at industrialised countries. Industrialised countries have considerably better data collection facilities, and often have access to time series data, to data at national, regional and sub-urban levels, and to data on specific population sub-groups differentiated by gender, income, age, ethnicity or race. It is expected that most industrialised countries will respond voluntarily at this level. The pages for completing this third level response, are *blue*.

It is proposed that all participating countries should collect data <u>for the urban and rural areas as a whole.</u> In the case of large countries with big regional differences, it would be preferable if the indicators were collected for the largest cities and for a selection of smaller cities, as well, to

give a true picture of regional diversity. In the largest countries an effort will be made to develop a national programme of this type.

The housing indicators consist of part of the Background Data Module from Volume II, which should be collected at the urban/rural level in this Volume, and two new modules, which have a number of submodules. The modules, following the sequence of Volume II, are:

> 7. **The Housing Affordability and Adequacy Module,** which deals with the affordability and condition of the housing stock.
>
> 8. **The Housing Provision Module,** which deals with the system of provision of housing, including land development, finance, construction, subsidies, public housing, and regulation.

These two broad areas of housing activity, which approximately correspond to demand and supply, are each divided into a number of submodules which look at the affordability and quality of housing and at particular supply sectors: land, finance, construction, subsidies public housing, and regulation.

HOUSING INDICATORS WORKSHEET

INSTRUCTIONS

The following steps should be undertaken to complete the worksheet.

1. The level at which the indicators are to be collected should be established. This could be: the country as a whole, the urban and rural areas as a whole, or one or more cities and rural areas. The collection for rural areas may be restricted to the Rural submodule, if desired.

2. A base year or reference period should be established. This should be the most recent year for which the majority of data are available, and should preferably be the calendar year 1993 for comparability purposes. Wherever possible, data should be specified for this year, or updated from older data by extrapolation.

Stock data (e.g. housing stock, number of mortgages) should preferably be estimated as the average value during the year, but can be taken as the value at the middle of the year.

3. The most important issues for housing and land policy should be entered in each module. An area for these issues is provided after the introductory section in each module.

4. The data modules should be completed. These should be filled in or sent to appropriate experts or departments for checking.

No single person is expected to be simultaneously conversant with each of the module areas, and experts or departments with knowledge of each area will need to be contacted by the persons responsible for overall compilation of the data, in order to obtain authoritative estimates for each submodule.

Every effort should be made to complete the key indicators at least, and as many of the extensive indicators as possible. If data are not available, then estimates should be made. A high level of accuracy is not required, but simply enough to make a comparison possible with other cities in the country. An approximate result is better than no result at all, since this will provide a benchmark for future, more accurate estimates.

For each result, mention the area level, the year, and the sources of data (using a numbered bibliography list if necessary). This information may be included at the end of each submodule.

If the information requested can not be given, please explain asfollows:
NAV : not available
NAP : not applicable

5. A copy of the completed worksheet should be returned to the Indicators Programme office, and comments sought. The printed modules should be used as the medium for data collection and reporting in order to standardise reporting and to reduce errors.

HOUSING INDICATORS WORKSHEET

THE GENERAL APPROACH TO DATA COLLECTION AND REPORTING

All the indicators are either numbers, percentages and ratios. In a few 'audit' questions, there may be simply a checkbox for yes or no answers.

1.   Data collection and method:

One of the goals of this project is to assist national and international institutions which collect economic data in adding housing data to their collection efforts. The success of this effort depends on getting the most accurate information presently available. Where recent enough published data is available, this is preferable. If published data are not available or are not recent enough, you should try to obtain the best estimates possible.

The suggestions given below for collection of individual indicators vary between using "hard" data, i.e. published data which is desirable but not readily available for all indicators, and using "soft" data, i.e. indirect evidence or the informed opinion of experts. The preferred option should always be to use published data (adjusted for year, definition, etc.) whenever it is available and recent enough. For all data collected, the guiding principles are that it should be the best available, the latest available, and that it should be fully documented.

Data of high quality and comparability may be difficult to obtain, and comparability between countries will not be perfect. Often there are a number of different ways to approximate an answer. Some specific methodologies are given, but these are intended as suggestions. Implicit in all of the indicators, however, is the possibility of quoting published data or of using a different methodology. If this is done, then the source or methodology should be documented completely in the notes section. If the data provided are for anything other than the stated definition, please explain the differences in the notes section at the end of the submodule.

It is expected that completion of the survey in each urban area will be a collaborative effort, rather than the work of a single individual. Some modules can be completed solely by reference to secondary materials. Others will require consultation with a small group of experts, such as real estate developers, or quantity or land surveyors. Also, it is vital to get knowledgeable experts to interpret the survey and provide their most informed judgment on the values of the indicators.

It is not expected that new household surveys will be initiated to collect data. For modules which might eventually require detailed household or other surveys, we generally suggest obtaining an estimate or an "educated guess" from a group of expert observers in the field. This program is the first step in what is intended to be an iterative learning experience. Lessons learned by the data compilers in different countries and shared at regional meetings or in other ways are important tools for discovering the trade-offs between cost and reliability of the data. The ultimate goal is as much to develop cost-effective ways of collecting the indicators.

2.   Precision of data:

While data should always be estimated as accurately as possible given limitations of data or resources, the overall perspective of the programme should always be kept in mind, which is to provide a broad picture of the housing sector in a way that is useful to policy makers and which permits comparison between cities and policy regimes. The total picture of the housing sector is more important than a highly accurate value for any one variable, and highly inaccurate values

for all others. Data which might be insufficiently accurate for a detailed study of a single indicator, or for examining short-term variations in a single indicator, may be accurate enough. The general rule to be used is 'accurate enough for policy purposes', and an approximate method may be sufficient to achieve this level of accuracy.

Some indicators such as household size do not change quickly, and older data may safely be used, with extrapolation if necessary. Other series such as price data or incomes will change rapidly, and it is essential to have the most recent data possible. The dates for the data used, the method of calculation or estimation, and the sources used should be documented in the notes sections.

If the question asks for a median and only means are available, please attempt to calculate or estimate the median. Suggested methods for these calculations are included with the indicators. If these calculations cannot be performed, please provide the mean and note that this is the mean. Whenever an indicator is defined as a ratio or growth rate, please include the absolute numbers used in its computation. Spaces are provided in the module worksheets for these intermediate numbers.

3.   Documentation:

The worksheets describe what each indicator is intended to measure, and leave it to the collector to choose the best method for obtaining the information. This necessitates complete documentation for the data collected and methodologies used. Documentation should include background, geographical area (if necessary), data sources, methods of calculation, and adjustments, time period, recent changes, and data definitions. These are discussed more fully below.

For each indicator, there exists the option of just listing the indicator without using the provided methodology. If this is done, then the methodology used should be fully described in the notes, including intermediate variables collected to calculate the indicator. If the indicator itself is obtainable from published data and no calculations are necessary, please note this along with the source of the data.

a) **Background:** In addition to the general commentary on the housing sector as a whole, any background information necessary for understanding a particular indicator should be noted. This could include important institutional, political, or cultural aspects of the urban area which significantly affect the value of that indicator, but are considered too specific to be mentioned in the commentary. Any significant changes or shocks which have occurred recently and might have had a major effect on a particular indicator over the last five years should also be documented in the 'background' section for that indicator.

b) **Geographical Area and sample population:** For Habitat II it is intended that the indicators should be collected <u>at the national level</u>. However, the indicators system is generally intended to operate for a single jurisdiction, either urban or rural, and it is possible to calculate almost all indicators meaningfully at this level. In the case of cities, as in Volume II, indicators should preferably be collected for the whole urban area (built up area) rather than for particular administrative or statistical areas.

Generally the indicators are intended to be collected for the population as a whole, however all indicators may be collected for different population subgroups, eg ethnic or religious groups, women, socioeconomic groups or different family types.

c) **Currency:** 1993 is the year on which data collection is focused. All magnitudes with a currency as the unit of measurement may be converted into 1993 U.S. dollars using exchange data published in the June 1994 *International Finance Statistics*. If you have these data, you can compute the dollar equivalents of the local currency. To do this, multiply the amount in question by the mid year dollar exchange rate for the year in which the data were collected. The result is then deflated by the index in the following table, which shows inflation of the US dollar in recent years. If you do not have the means to convert the data into dollar values, please provide it in the local currency.

Please comment freely on the survey in your commentary**.** We want to ensure comparable data by having consistent interpretations of the definitions and questions. In the end, the purpose of this endeavour is to generate information that will be useful to you, and to others in your position, in measuring housing sector performance. If a section of the survey poses the questions in a way that misses the real story, please let us know. Please suggest additional or alternate questions that would capture the housing situation in your urban area more accurately.

INTRODUCTION

HOUSING INDICATORS WORKSHEET

GENERAL DEFINITIONS

Gross city product: the total product of the city as defined in national accounts procedures. This may either be taken as the total income or value-added (wages plus business surplus plus taxes plus imports), or the total final demand (consumption plus investment plus exports).

Household: a person or group of persons who make common provision for food or other essentials of living, and often share a common budget. A group of people who eat one meal together daily may be considered a household. This definition includes domestic servants.

Dwelling unit: a dwelling unit is a space with a private entrance occupied by one or more households. It may be part of a larger structure or dwelling. 'Units' is used interchangeably with 'dwelling units'.

Household income: the total income from all sources of all household members, including wages, pensions or benefits, business earnings, rents, and the value of any business or subsistence products consumed (e.g. foodstuffs). Payments such as allowances or board from one household member to another should not be counted twice.

Metropolitan area: the politically defined urban area for planning or administrative purposes which combines all local jurisdictions normally regarded as part of the greater urban area.

Room: Rooms in this study denote <u>habitable rooms,</u> which includes all space used for living, sleeping, and eating. Hallways, stairways, bathrooms and toilets are not included. Kitchens are included if used for eating or living.

Urban area or urban agglomeration: defined as the city proper along with the suburban fringe and any built-up, thickly settled areas lying outside of, but adjacent to, the city boundaries.

0. BACKGROUND DATA MODULE

HOUSEHOLDS

Indicator D4: Woman headed households
Indicator D5: **Average household size**
Indicator D6: Household formation rate
Indicator D7: Household income distribution

Indicator DA3: Household type
Indicator DA4: Household expenditures

HOUSING

Indicator D9: Housing tenure type

Indicator DA5: Dwelling type

BACKGROUND DATA MODULE

This module asks for some general data on the shelter sector which are extremely helpful in establishing a picture of the sector and of households.. The data are indicators only in the broadest sense, in that they are basic structural information affected by the whole range of policy in a particular area. Some of these numbers (for example, woman headed households and tenure type) are used in calculating other indicators.

Key indicators

HOUSEHOLDS

Indicator D4: Woman headed households

          Defined as number of households headed by women

This indicator is important for a number of gender related issues. In particular, it has been found that in most countries, there is a much higher level of poverty and disadvantage in female-headed households.

If household headship is not established in the census, then number of households consisting entirely of women or women and children is a suitable substitute (please note this).

Indicator D5: Average household size (persons)

Average household size is a commonly used measure incorporating both family size and the existence of shared households or extended families. Household size is decreasing in most countries, and along with population growth, the change in household size determines household formation and demand for housing.

Data sources:

Notes: (Background, geographical area, method of calculation, time period, other).

Indicator D6: Household formation rate

Defined as annual rate of growth of numbers of households.

This is the prime indicator of housing demand, representing the required growth in the number of occupied dwellings per annum. It can change quite rapidly according to economic conditions (since households form when they have the financial resources to do so) or in response to supply restrictions.

Indicator D7: Household income distribution

Household income by quintile: income range and average income.

Quintile	Interval (US$)	Average income (US$)
1		
2		
3		
4		
5		

Quintiles are obtained by dividing households into 5 equal groups ordered by income.

This information is generally available from a household expenditure or income survey. Incomes should include all forms of earnings: wages, supplements, government transfers, business or investment earnings, consumption of stocks, etc. If households are typically underreporting income because of informal earnings, then household expenditure should be used. Intervals and average incomes should be inflated to 1993 values, if the survey is in an earlier year.

If household income is not available in quintiles but in some different format (eg numbers of households within some other set of intervals) then it is possible to estimate quintiles from these data. Please contact the Indicators Programme.

Note that the median household income can be taken as the average income in the third quintile.

Data sources:

Notes: (Background, geographical area, method of calculation, time period, other).

HOUSING

Urban housing conditions, affordability and tenure are a major part of the Indicators Programme. The proportion of households in various tenures are sought in several other indicators which can be calculated from the comprehensive list of tenures used here.

Indicator D9: Tenure type

Number of households in tenure categories

a. owned	b. purchasing	c. private rental	d. social housing	e. sub-tenancy	f. rent free	g. illegal	h. other

---

Owned refers to housing with a clear title (formal housing) which is owned outright by the occupant.
Purchasing is formal owner-occupied housing with a mortgage
Private rental is formal or informal housing for which rents are paid to a landlord
Social housing includes all public, parastatal or NGO-operated housing, and co-operatives.
Sub-tenancy refers to households who are renting from a principal household on the same block, who may in turn be owners, private renters or social renters.
Illegal Squatter or informal housing for which rents are not paid should be included in this category.

Tenure data are usually obtained from household surveys or the census. If data are not available at this level of detail, then groups should be aggregated (this should be indicated).

Data sources:

Notes: (Background, geographical area, method of calculation, time period, other).

<u>Extensive indicators</u>

<u>HOUSEHOLDS</u>

Indicator DA3: Household type

Numbers of households with:

a. More than one adult and children	
b. Single parent households	
c. More than one adult, no children	
d. One person only	

Household type is a measure of the kinds of demands expected on urban services by different family and household structures.

Indicator DA4: Household expenditures

Proportion of average household income spent on

a. Food	%
b. Housing	%
c. Travel	%
d. Other	%

Household expenditure on a range of commodities is a major determinant of demand. For lower income households, the necessary costs of major items in the budget may place the household below the poverty line.

Data sources:

Notes: (Background, geographical area, method of calculation, time period, other).

HOUSING

Indicator DA5: Dwelling type (numbers)

a. Detached	b. Medium density	c. Apartment	d. Total

Medium density refers to semi-detached, terrace or town housing with a ground entrance. Apartment housing is housing in buildings in which most dwelling units do not have a ground entrance.

Type of dwelling is almost always collected as part of the census, although these particular categories are not always used. The indicator shows the predominant style of housing in the country or city.

Data sources:

Notes: (Background, geographical area, method of calculation, time period, other).

MODULE 7. AFFORDABLE AND ADEQUATE HOUSING

ACCESS TO AFFORDABLE HOUSING

Key Indicators
Indicator H1: House price to income ratio
Indicator H2: House rent to income ratio

Extensive Indicators
Indicator HA1: Mortgage affordability
Indicator HA2: Excessive housing expenditure
Indicator HA3: Economic share of housing
Indicator HA4: Transaction costs
Indicator HA5: House price appreciation

Intensive Indicators
House price to income ratio
House rent to income ratio
Mortgage affordability

ADEQUATE HOUSING FOR ALL

Key Indicators
Indicator H3: Floor area per person
Indicator H4: Permanent structures
Indicator H5: Housing in compliance

Extensive Indicators
Indicator HA6: Overcrowding
Indicator HA7: Households per dwelling
Indicator HA8: Inadequate housing
Indicator HA9: Indoor plumbing
Indicator HA10: Squatter housing
Indicator HA11: Homelessness
Indicator HA12: Owner occupancy (by sex)
Indicator HA13: Vacant dwellings

RURAL HOUSING

Extensive Indicators
Indicator HA14: Rural water/electricity connection
Indicator HA15: Permanent rural housing
Indicator HA16: Rural home ownership
Indicator HA17: Rural house price to income

MODULE 7. AFFORDABLE AND ADEQUATE HOUSING

General Information

The major housing concern of citizens and the main reason why governments are involved in housing is to ensure that all citizens have access to adequate housing at an affordable price. These aims are often in conflict, in that what is generally accepted to be adequate housing may not be affordable to a large part of the population.

It is agreed, however, that in a well functioning housing market, housing expenditures should not take up an undue portion of household income. If this condition does not hold, it is an indication of an underlying problem which is restricting affordability, or causing instability in the supply of housing.

The key measures of affordability are the **House price-to-income ratio** and the **House rent-to-income ratio**. When house prices and rents are high relative to incomes, a smaller fraction of the population will be able to purchase or rent a house. The indicators provide important insights into several housing market dysfunctions, indicative of a variety of policy failures. When the indicators are abnormally high, for example, it is generally a sign that the housing supply system is restricted in its ability to satisfy effective demand for housing, a feature of many housing delivery systems in both market and centrally-planned economies. In such cases, it is often found that housing quality and space are depressed below levels that are typical of countries with well-functioning and responsive housing delivery systems.

If the price indicator is abnormally low, it may indicate widespread insecurity of tenure, a situation which leads to reduced willingness of the population to invest in housing and to lower than necessary housing quality. When the rent indicator is abnormally low, this usually indicates widespread rent control, or widespread subsidies in the public or private rental sector.

Extensive indicators of affordability include **Mortgage affordability** (which depends on house prices, incomes and the interest rate), **Excessive housing expenditure** for lower income households, the **Economic share of housing** (which measures the macroeconomic contribution of housing and combines both prices and rents), **Transaction costs,** which measures the cost of moving for owners, and **House price appreciation,** which measures changes in prices.

The submodule dealing with adequacy includes as key indicators the **Floor area per person**, together with two measures of formal or informal housing: **Permanent structures** and **Housing in compliance** with regulations (authorised housing). The alternate indicators look at **Overcrowding** and **Households per dwelling**, which examine the match between stock type and household type, **Inadequate housing** in the formal sector and housing with **Indoor plumbing,** as measures of stock quality, and **Squatter housing** and **Homelessness**, as measures of availability.

Indicators of access such as **Owner occupancy** and **Vacant dwellings** are also included. The former depends on affordability and on access to ownership rights and to finance, while vacant housing may either reflect a wide range of available stock for life-cycle mobility and migration, it may relate to the ownership of holiday houses, or it may represent poor distribution of the stock, restrictions on sale, excess supply, or strict rent control regimes which cause investors to keep housing off the market.

The rural housing submodule is intended to look at housing conditions in rural areas as a whole, and should be the minimum collection for rural areas. Access by rural residents to adequate shelter and infrastructure is a pressing need in many countries. Public infrastructure projects that benefit urban residents often do not extend to rural areas, and credit and finance institutions are not well established to mobilise investment. Construction is often carried out informally, and does not conform to pre-established safety and land use codes as in urban areas. **Rural water and electricity connections** are measured for rural areas in this submodule, as well as **Permanent rural housing, Rural home ownership** and **Rural house price to income.**

List Major Issues:

1..
....
....
2..
....
....
3..
....
....
4..
....
....

ACCESS TO AFFORDABLE HOUSING

Key Indicators:

Indicator H1: House price to income ratio

Defined as the ratio of the median free-market price of a dwelling unit and the median annual household income.

If there is a single indicator which conveys the greatest amount of information on the overall performance of housing markets, it is the House price-to-income ratio. The ratio takes values ranging from around 1 in sub-Saharan Africa to values as high as 15 in metropolitan Tokyo. The considerable variation in values in apparently similar countries directly reflects the availability of housing and land under different policy regimes.

Median house price $ [   ]   Median annual household income $ [   ]
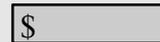
Median household income

Household income is defined as gross income from all sources, which include wages, salaries, incomes from businesses or informal sector activities, investment income, and where information is available, income in-kind such as consumption of agricultural produce which might have been sold.

The following methods for calculating median household incomes are suggested:

1. Many countries may have recent household surveys containing information on median urban household incomes or expenditures which can be used directly, as in Indicator D7. Expenditures data rather than incomes data may be used to estimate incomes if these data are more readily available (in fact, for lower income earners or where incomes are routinely concealed, expenditures may be a better measure of income than reported incomes).

2. Mean incomes are often easier to obtain as a recent estimate (for example, by dividing household income or household expenditure in the National Accounts by the number of households). If a survey is available as well which has mean and median incomes, but which is too old to yield good estimates of household income, the ratio of median to mean incomes may still be used to obtain a new median from the new mean, because the distribution of incomes does not change as rapidly as incomes themselves.

3. Taxation departments maintain records of gross incomes for taxable purposes, though these are usually on an individual level rather than a household level. An approximate estimate for household income may be made by multiplying the median level of individual income by the mean number of income-earners per household. This method is not very reliable however,

because not all incomes are reported, particularly those of informal workers or low-income people.

Median house price
Housing value is defined as the price at which a house would sell if placed on the market for a reasonable length of time by a seller who is not under pressure to sell.

The median-priced house in the urban area is that house which has 50% of the houses priced below it, and 50% of the houses priced above it. The calculation of the price of the median-priced house should, therefore include all housing, both new and old, and both formal and informal. If, for example, the majority of the housing stock is informal, and the informal housing stock is generally cheaper than the formal housing stock, then the median priced house will probably be an informal unit.

For blocks of apartments or multiple-family dwellings which are usually sold as a single building, the value of one dwelling unit should be estimated as a pro rata share of the total sale price. This is particularly relevant for countries in Africa where the majority of housing is of this type.

The following methods are available for estimating the median.

Method 1. Where the informal sector is small and data is reliable, median house price can be determined directly from published (formal) sales figures or from recent surveys.

Method 2. If recent average prices are available, they can be converted to median price by using a median/mean ratio from an older household survey. In much of the research done on housing markets in developing countries, it has been found that median prices are generally about **70 per cent** of the average. This figure is higher when housing is more equally distributed and lower when housing is more unequally distributed.

Method 3. If no direct data are available, then prices need to be estimated for each submarket as follows. Enter percentage of all housing units and price range per unit in the following table.

Type	% of stock	Price range
Squatter housing		
Low-cost apartments		
Single family housing		
Luxury houses		

This information should then be graphed as in the following example.
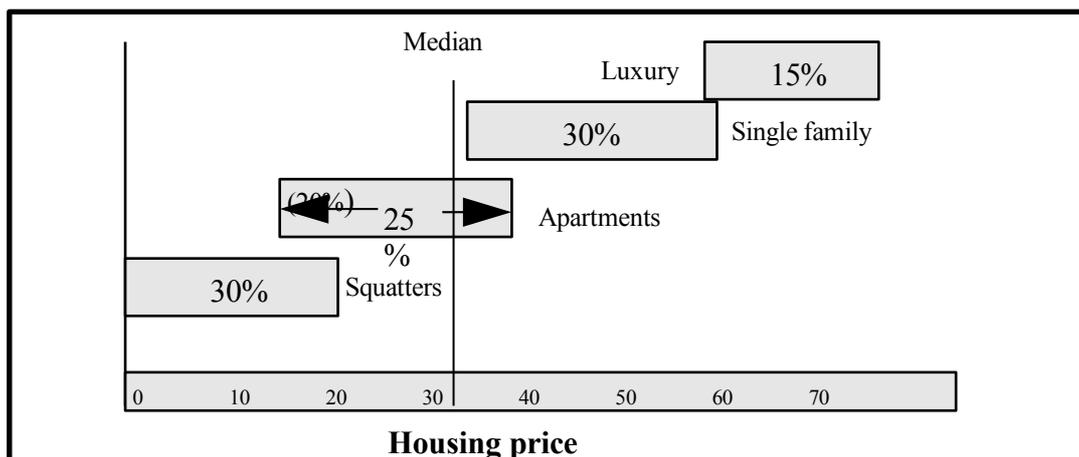
In this example, the median priced unit will be an apartment. Apartment prices range from 15 to 40 price units. Informal dwellings are 30% of the total, and apartments cover up to 55% of the total. The median priced dwelling will be an apartment for which 50% of all dwellings will be cheaper, ie 20/25 of all apartments will be cheaper. The median price is therefore 20/25 of the way up the price range for apartments, viz:

$$\text{Median price} = 15 + 20/25*(40-15) = 35.$$

presuming apartments are distributed evenly within the price range. So in this case the median price is 35 units.

In some cases, the price ranges of several different kinds of dwellings may overlap around the median, so that the median dwelling could be of either type. The median can still be estimated by a variant of the above procedure. Please contact the Indicators Programme for instructions.

Newspapers, or a number of developers and real estate agents, can be consulted to get estimates of house prices for single-family or multi-family housing in the formal sector. In urban areas with large informal sectors, an approximation may be obtained through unstructured interviews with households, businesses, and NGOs involved in this sector. Areas of the urban area embodying different types of housing should be identified, and interviews held with people involved in the housing market in that area.

Data sources:

Notes: (Background, geographical area, method of calculation, time period, other).

Indicator H2: House rent to income ratio.

Defined as the ratio of the median annual rent of a dwelling unit and the median household income of renters.

This indicator, like the house price-to-income ratio, is a key measure of housing affordability. In a well-functioning housing market, housing expenditures should not take up an undue portion of household income. As in the case of the house price-to-income ratio, this indicator conveys information on more than just affordability, however. A relatively high value for this indicator is often a sign that the supply of rental housing is failing to meet demand, which is sometimes associated with lower than necessary housing quality. A particularly low value for this indicator is a sign of the prevalence of public housing, or of rent-control measures.

If controlled or public rents are significantly different than uncontrolled rents, then the indicator should be estimated separately for each sector, and the weighted average taken. This is necessary to prevent anomalous results.

Incomes should be median <u>gross</u> income of private and public <u>renter</u> households. Where renter household income data do not exist, median income of all households can be used. Rents should be <u>contract rents</u>, or the amount paid for the property alone and not for utilities such as electricity, heating etc.

	Uncontrolled	*Controlled*
Median annual rent (USD)	$	$
Median annual renter household income (USD)	$	$

If median rent data cannot be located, then an estimation procedure similar to that of Method 3 of the previous indicator may be used, with ranges of rents estimated separately for different categories such as public housing, controlled rents, one bedroom and two bedroom furnished and unfurnished apartments, and single family houses of different types. The median price will be part way up the price ranges of the median dwelling types.

Data sources:

Notes: (Background, geographical area, method of calculation, time period, other).

Extensive Indicators:

Indicator HA1: Mortgage affordability.

%

Defined as proportion of households who are eligible for and can afford the maximum loan on a median priced formal sector house.

This indicator measures the affordability of formal sector housing using mortgage finance. It depends on bank practices such as the mortgage instruments in use, on maximum proportion of income permitted as repayments, and on maximum permitted loan-to-valuation ratios, as well as on interest rates and house prices. It does not allow for the fact that high deposits may be necessary.

The indicator is calculated by estimating the maximum permissible loan on a median priced house, estimating the minimum household income to be able to afford such a loan under current major lender practices (possibly for different household types), and then the proportion of households with incomes above this minimum level.

For example, if the median house price is $80000 and lenders require a minimum 20% deposit, then the maximum loan is $64000. If the typical loan is of depreciating balance type over 25 years at 8% per annum, the annual loan repayment would be approximately $6000. If lenders allow payments of up to 25% of income, then the minimum income to afford this loan would be $24000. The proportion of households with incomes below $24000 will be the indicator value (presuming that certain kinds of households such as single person or woman headed households are not treated differently).

If different household types are subject to different eligibility requirements, this should be noted and the proportions eligible should be added separately.

Data sources:

Notes: (Background, geographical area, method of calculation, time period, other).

| Indicator HA2: Excessive housing expenditure. | % |

Defined as proportion of households in the bottom 40% of incomes who are spending more than 30% of their incomes on housing.

This is an indicator of a serious affordability problem for lower income households who are paying excessive amounts of their income on housing, so that housing costs may be contributing to household poverty. Such households are in danger of losing their homes, so this is a key leading indicator of homelessness. In developing countries, a high value for this indicator indicates that housing is too expensive for lower income households, while in developed countries it is a sign that social welfare payments or public housing are not reaching a sufficient proportion of the population.

This indicator can be estimated from household expenditure or housing surveys, or from the census if it contains income and rent information. Housing expenditure includes contract rent, principal and interest payments for mortgages, repairs, maintenance and property taxes, but not payments for services or capital payments to purchase or improve housing.

| **Indicator HA3: Economic share of housing** | % |

Defined as proportion of national or city product due to rent or imputed rent of dwellings

This indicator is a combined measure of both house and rent price, measuring the contribution of housing to national or city product in the manner defined in national accounts.

The national accounts generally contain an estimate both of house rents and of the imputed rental value of owner occupied dwellings. At the city level, the city product of the housing sector can be calculated from the national figures in the same manner that other components of the city product are estimated in Volume II, Indicator D7.

$$Y_c = p_c/p_n \times H_c/H_n \times Y_n$$

where Y_c, Y_n are the city product and national product of the housing occupancy sector
p_c, p_n are the average city house price and national house price
H_c, H_n are the number of dwellings in the city and nationally, respectively

The city product should be obtained from Volume II, Indicator D7. It can be estimated by adding up the products of different industry sectors, or less accurately by multiplying total household income (= average city household income times number of households) by the national consumption to GDP ratio, from the National Accounts.

Indicator HA4: Transaction costs.	%

Defined as proportion of the value of a median-priced formal sector house which must be spent to both buy and sell the house.

These costs include total costs of both buying and selling a median formal sector house, including stamp duties, payments to estate agents, valuation and land registration charges, mortgage application, registration and discharge payments for typical mortgages, legal costs and other payments relating to buying and selling a house.

The costs of buying and selling a house may be a major impediment to mobility for owner-occupants. Such taxes and charges are, however, a major source of income for some governments, as well as for a range of professionals who depend on these costs as their major source of income. High costs may represent high government charges or a lack of competitiveness in the sales industries.

Data sources:

Notes: (Background, geographical area, method of calculation, time period, other).

Indicator HA5: House price appreciation.	%

Defined as the average annual real percentage rate of change of house prices over a five year period.

Average house prices rather than median should be used, if possible, and these prices should be expressed in local currencies corrected for average price inflation, using a consumer price index or similar. The average percentage rate of change r can be calculated from

$$r = ((B/A)^{1/5} - 1) \times 100.$$

where B is the current house price and A is the price 5 years ago (in today's values).

In a city which is not growing and where real incomes are not increasing, house prices should increase at roughly the same rate as consumer prices. However, when incomes are rising the average quality of housing increases which is represented in higher prices. Also as the city expands, the premium paid for central land increases, so that rapidly expanding cities tend to have real price increases. Increases in transport costs such as an oil price shock can be expected to cause an increase in land and house prices also.

The value of this indicator will also reflect disequilibrium conditions in the market. A high level for this indicator is a sign that supply is failing to respond to demand pressures, either because demand has increased more rapidly than supply can follow, or because of bottlenecks in the supply system. Conversely, a low or negative value for this indicator is a sign of oversupply or depressed demand for housing.

Data sources:

Notes: (Background, geographical area, method of calculation, time period, other).

Intensive Indicators:

The Intensive Review of this submodule calls for the collection of comprehensive indicator data for three indicators: **Indicator 1: House price-to-income ratio**, **Indicator 2: Rent-to-income ratio,** and Indicator HA1: Mortgage affordability**.**

Indicator H1: House price to income ratio

Defined as the ratio of the median free-market price of a dwelling unit and the median annual household income.

The Intensive Review of the **House price-to-income ratio** should include three associated graphs:

Graph 1: Time Series, 1974-1994

This graph should include time series information on the **House price-to-income ratio** covering the period 1974-1994 at

a. the national level;

b. the urban population;

c. the rural population; and

d. selected cities.
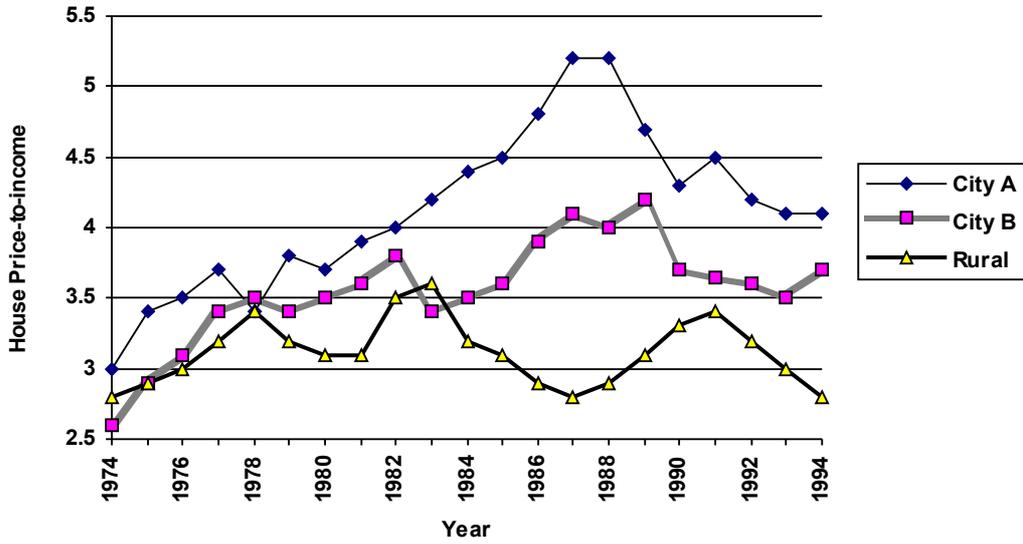
Graph 2: Distribution by Income, 1974-1994

This graph should show the distribution of the **House price-to-income ratio** for ten income deciles for three time periods: 1974, 1984 and 1994. Smaller numbers of income intervals (quintiles or quartiles) may be used.

Graph 3: Distribution by Social Groups, 1974-1994

This graph should show the distribution of the **House price-to-income ratio** for different social groups, e.g. female-headed households, different racial and ethnic groups, large families, or the elderly.

These graphs, like all subsequent graphs in the Intensive Review, should be accompanied by tables containing the numerical information contained in the graphs. Examples of such graphs are given below.

House Price-to-income Ratio 1974-1994

Distribution by income
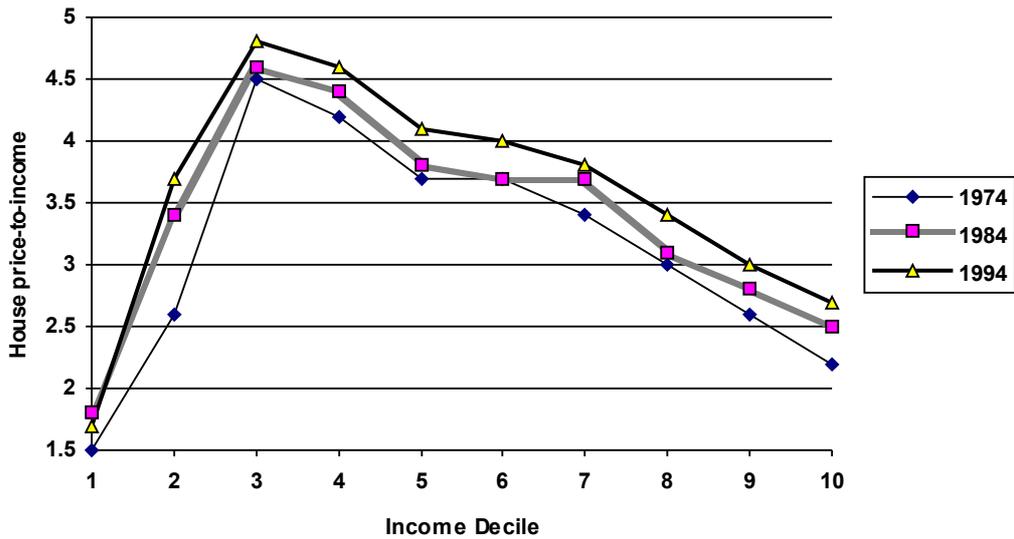
Indicator H2: House rent to income ratio.

Defined as the ratio of the median annual rent of a dwelling unit and the median household income of renters.

The Intensive Review of the **Rent-to-income ratio** should include three associated graphs:

Graph 1: Time Series, 1974-1994

This graph should include time series information on the **Rent-to-income ratio** covering the period 1974-1994 at

a.   the national level;

b.   the urban population;

c.   selected cities.

Graph 2: Distribution by Income, 1974-1994

This graph should show the distribution of the **Rent-to-income ratio** for ten income deciles for three time periods: 1974, 1984 and 1994.

Graph 3: Distribution by Social Groups, 1974-1994

This graph should show the distribution of the **Rent-to-income ratio** for different social groups, e.g. female-headed households, different racial and ethnic groups, large families, or the elderly.

Data sources:

Notes: (Background, geographical area, method of calculation, time period, other).

The Intensive Review of Mortgage affordability should contain a single graph:

Graph 1: Time Series, 1974-1994

This graph should include time series information on the **Rent-to-income ratio** covering the period 1974-1994 at

a.   the national level;

Data sources:

Notes: (Background, geographical area, method of calculation, time period, other).

ADEQUATE HOUSING FOR ALL

Key Indicators:

Indicator H3: Floor area per person.

sq.m

Defined as the median floor area per person in square metres.

This indicator measures the adequacy of living space in dwellings. Floor area per person is the outcome, to a considerable degree, of market forces, which are in turn shaped by a variety of housing policies. A low value for the indicator is a sign of overcrowding. Floor area per person and an alternate indicator, persons per room, are highly variable among countries and are highly related to each other.

The floor area should include all living space, along with bathrooms, internal corridors and closets. Covered semi-private spaces such as corridors, inner courtyards or verandahs should be included in the calculation if used by the household for cooking, eating, sleeping, or other domestic activities.

If data from household surveys or from a recent census is available, it can be used. In the absence of better data, the floor area of the median priced dwelling may be used as an approximation, although this may not be an accurate estimate. If the median cannot be estimated then the average should be provided instead.

The median floor area of a unit should be divided by the average numbers of persons per household (Indicator D5).

Indicator H4: Permanent structures.

%

Defined as the percentage of dwelling units which are likely to **last twenty years or more** given normal maintenance and repair, taking into account locational and environmental hazards (e.g. floods, typhoons, mudslides, earthquakes).

This indicator is one measure of the quality of housing, particularly of its durability. Very low-quality housing is usually made of semi-permanent or temporary materials such as straw, cardboard or cloth, which fail to provide adequate shelter from the elements and which deteriorate rapidly in the absence of frequent maintenance and repair. Permanent structures usually provide better protection from the elements and a higher standard of structural safety, and require a higher level of initial investment.

Although many countries have definitions of stock durability, this particular indicator has been found to be relatively straightforward to measure, and distinguishes housing conditions in developing countries readily. Yet because the indicator attains its maximum value, 100 percent, among countries at only a modest level of GNP per capita, other housing adequacy measures

which permit distinctions to be made among countries at higher levels of economic development are necessary.

<div>

Indicator H5: Housing in compliance

%

Defined as the percentage of the total housing stock in the urban area which is <u>in compliance</u> with current regulations (authorised housing).

</div>

This indicator measures the extent to which the urban population is housed legally. Only housing which both has a clear title to the land on which it stands, and which is constructed with all required building, land use, or land subdivision permits should be regarded as in compliance. A low value for this indicator is a sign that housing development is proceeding without proper government controls, and that government is either tolerant of housing which does not comply with its regulations or is unable to prevent trespasses.

Unauthorised housing is not recorded in housing statistics, and information must be gathered through conversations with builders, developers, officials or researchers. Housing in compliance should exclude all housing which does not conform to land ownership regulations, ie all squatting. Small additions or modifications to a unit in compliance should not change the status of a unit to unauthorised.

Data sources:

Notes: (Background, geographical area, method of calculation, time period, other).

.

Extensive Indicators:

Indicator HA6: Overcrowding.	%

Defined as the percentage of households who are in housing deemed to have too few bedrooms for a family of that type.

A dwelling is regarded as overcrowded if there are more than two people in a bedroom or if children of different sexes share a bedroom.

This indicator attempts to measure the mismatch between types of dwelling and dwelling needs for different family types. The indicator may be estimated by comparing different sizes of housing with different family types, as in the following table:

	Dwellings	*Households requiring no more than:*
One bedroom		
Two bedrooms		
Three bedrooms		
Four or more bedrooms		

The excess of the last column over the second column, taken as a fraction of all households, defines the indicator.

Data sources:

Notes: (Background, geographical area, method of calculation, time period, other).

Indicator HA7: Households per dwelling.

Defined as the ratio between the total number of households and the total number of <u>occupied</u> dwelling units of all types in the urban area.

This indicator looks at the extent to which households are sharing dwelling units. High values may be associated with limited housing stock which forces households to share units, with repressed new household formation as marriages are delayed or young adults fail to seek independent accommodations, or may be due to customary extended family structures.

Note that this indicator refers to shared <u>units</u>, and not to shared structures or what are known as multi-family dwellings. Also vacant dwelling units should be excluded from the denominator.

Indicator HA8: Inadequate housing.

%
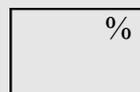
Defined as the proportion of dwellings that are deemed to be inadequate or in need of major repairs..

This indicator is intended largely to measure those formal-sector houses which are deemed inadequate, though it may also be used for the informal sector. It includes all condemned dwellings, or dwelling units which are considered to require substantial repairs in excess of 25% of the present value of the property, to bring them in line with current standards.

This indicator is expected to be useful in transitional countries, where a substantial proportion of (formal) dwellings are in poor condition or do not meet present standards.

Data sources:

Notes: (Background, geographical area, method of calculation, time period, other).

This is an indicator of housing quality in the formal sector which embodies both the notion of a "complete" bathroom with running water, bathing facilities, and waterborne sewage and that of private, unshared facilities. Each aspect is of value to households and is also related to the price of housing.

This indicator measures a major element of the degree of legality of housing, and is thus an indicator of tenure security. It is related to Indicator H5: Housing in compliance, which excludes squatter housing, but also housing in contravention of building, land subdivision and zoning regulations. High levels of squatter housing indicate that the formal land market does not provide affordable residential land for housing, forcing households to occupy land illegally. High levels of this indicator also suggest that eviction may not be a realistic option, but rather call for policies and programs which lead to strengthening tenure security in squatter settlements, thus facilitating higher levels of housing investment. Squatter housing is also usually associated with lower levels of residential amenities and requires public investment in infrastructure services.

This indicator should not include the dwelling units which have been regularised, i.e. those units for which land titles, leases or occupancy permits have been granted. It should only include those units which presently occupy land illegally. Note that the indicator refers to dwelling units and not to households.

Data sources:

Notes: (Background, geographical area, method of calculation, time period, other).

> **Indicator HA11: Homelessness.**
>
> [ ]
>
> Defined as the number of people per thousand of the urban area population who sleep outside dwelling units (e.g. on streets, in parks, railroad stations, and under bridges) or in temporary shelter in charitable institutions.

As people may move in and out of homeless situations during the year, this should measure homelessness <u>on one particular night,</u> not those who are homeless for some time in the year (which may be considerably more).

This indicator is a quantitative measure of the extent to which the operation of the housing sector fails to ensure that everyone is housed. In principle, a well-functioning housing sector should have zero homelessness. A high level of homelessness generally implies a shortage or lack of housing, regardless of quality, affordable to the lowest-income segment of the market.

This is a restrictive definition of homelessness, but one which measures those who have no home at all.

> **Indicator HA12: Owner occupancy (by sex)**
>
> a. All households [%]   b. Female headed [%]
>
> Defined as the percentage of households which own the dwelling units which they occupy.

This indicator is a measure of residential choice. A high value for this indicator is a sign of a preference for owning housing, while a low value is a sign of a preference for renting. Some societies have a high preference for owner-occupation, seeing this as a sign of social stability, a positive form of social investment by households which reduces the need for social security, and which emphasises values of the family and 'home'. Other societies have no such strong preference. There is, however, no proven inherent social value in higher levels of home ownership, especially if the rental housing sector is vibrant and efficient. Owner-occupancy may, however, have important implications for the distribution of wealth, and high levels of ownership tend to marginalise renters.

Owner-occupancy data can be determined from census figures, or from household surveys. Note that this indicator refers to ownership of the dwelling and specifically does not deal with ownership of the land. Owner-occupancy on rented land or on squatter-occupied land should also be included. The definition aims to include a broader group of owners than just those with legal title to both house and land.

<u>Cooperative housing</u> is considered to be owner-occupied, for the purpose of this indicator, unless it is a rental cooperative. Units occupied <u>free of charge</u> should not be counted as owner-occupied.

Female owner-occupancy is a major measure of female access to property, which may be limited by law, custom or inheritance, or by lack of access to capital and to finance. Low values for this indicator may indicate either customary or institutional limitations.

Indicator HA13: Vacant dwellings. %

Defined as the percentage of the total number of completed dwelling units which are presently unoccupied.

The vacancy rate should include <u>all</u> vacant units, both those that are <u>on</u> the market and those that are <u>off</u> the market (e.g. second homes).

This indicator shows the potential stock available for occupation. A very low level for this indicator is a sign of housing supply shortages, and a level of supply insufficient to allow for adequate housing market activity. A high vacancy level may indicate structural inadequacies in the market which prevent housing being exchanged or occupied, a declining population, a large number of second homes, or a mismatch between stock and household type.

Data sources:

Notes: (Background, geographical area, method of calculation, time period, other).

Intensive Indicators:

The Intensive Review of this submodule calls for the collection of comprehensive indicator data for **Indicator HA12: Owner occupancy**.

Indicator HA12: Owner occupancy

Defined as the percentage of households which own the dwelling units which they occupy.

Graph 1: Time Series, 1974-1994

This graph should include time series information on the **Owner-occupancy rate** for all households covering the period 1974-1994 at

    a.   the national level;

    b.   the urban population;

    c.   the rural population; and

    d.   selected cities.

Graph 2. Distribution by income.

This graph should show the distribution of owner occupancy for ten income deciles for three time periods: 1974, 1984 and 1994.

Graph 3. Distribution by social groups.

This graph should show the distribution of owner-occupancy for different social groups, e.g. different racial and ethnic groups, large families, single persons, or the elderly.

Data sources:

Notes: (Background, geographical area, method of calculation, time period, other).

RURAL HOUSING

Extensive Indicators:

> Indicator HA14: Rural water/electricity connection.
>
> a) Water [%]   b) Electricity [%]
>
> Defined as the percentage of rural dwelling units with a water or electricity connection in the plot they occupy.

This indicator is an important measure of rural housing quality, focusing on the level of residential amenities associated with the basic rural house structure. Access to water on site provides significant benefits to rural households; without on-site water, family members, especially women, are obliged to spend inordinate amounts of time collecting and boiling water. High values of this indicator are likely to be associated with both better health and more productive households, since household members are able to allocate more time to productive activities.

Access to electricity facilitates some directly productive activities, may reduce costs of other household activities, and encourages pursuit of education. Likewise, it is an indirect measure of the extent of the provision of government infrastructure and services to rural areas.

> Indicator HA15: Permanent rural housing. [%]
>
> Defined as the percentage of rural dwelling units which are likely to **last twenty years or more** given normal maintenance and repair, taking into account locational and environmental hazards (e.g. floods, typhoons, mudslides, earthquakes).

This indicator is a measure of the quality of rural housing, particularly its durability. It also may be an indirect measure of the extent of well-established property rights in rural areas, in that households with more secure tenure are more likely to invest in upgrading their dwellings.

Indicator HA16: Rural home ownership.	%
Defined as the percentage of rural residents who own their dwellings.	

This indicator is a measure of affordability and an indirect measure of tenure security. A low value for this indicator may reflect insecurity of tenure and reduced willingness of the rural population to invest in housing. It may also indicate lower than necessary housing quality. Likewise, an increasing value for this indicator over time may indicate rising rural incomes and subsequent higher levels of investment in housing.

Indicator HA17: Rural house price to income	
Defined as the ratio of the median free-market price of a rural dwelling unit and the median annual rural household income.	

This indicator is a key measure of housing affordability for rural residents. When house prices are high relative to incomes, other things being equal, a smaller fraction of the rural population will be able to purchase a house. A high value could also point to latent demand for housing, inadequate financing mechanisms for rural residents, and poor housing quality

Data sources:

Notes: (Background, geographical area, method of calculation, time period, other).

.

MODULE 8. HOUSING PROVISION

LAND

Key indicators
Indicator H6: Land development multiplier
Indicator H7: Infrastructure expenditure

Extensive indicators
Indicator HA18: Land availability
Indicator HA19: Planning permission multiplier
Indicator HA20: Formal land transactions
Indicator HA21: Development time
Indicator HA22: Cost recovery
Indicator HA23: Minimum lot size
Indicator HA24: Land development controls

Intensive indicators
Indicator HB1: Land price gradient:
.

FINANCE

Key indicators
Indicator H8: Mortgage to credit ratio

Extensive indicators
Indicator HA25: Credit to value ratio
Indicator HA26: Housing loans
Indicator HA27: Mortgage-to-prime difference
Indicator HA28: Mortgage-to-deposit difference
Indicator HA29: Arrears rate
Indicator HA30: Mortgage loans for women

Intensive indicators
Credit-to-value ratio
Mortgage-to-deposit rate difference

CONSTRUCTION

Key indicators
Indicator H9: Housing production
Indicator H10: Housing investment

Extensive indicators
Indicator HA31: Construction cost
Indicator HA32: Construction time
Indicator HA33: On-site productivity
Indicator HA34: Industry concentration
Indicator HA35: Employment
Indicator HA36: Wage labour

Intensive indicators
Housing production
Housing investment
Indicator HB2: Housing starts

TAXES AND SUBSIDIES

Extensive indicators
Indicator HA37: Effective taxation rate by tenure
Indicator HA38: Nett housing outlays by government
Indicator HA39: Property tax rate

PUBLIC HOUSING

Extensive indicators
Indicator HA40: Public housing stock
Indicator HA41: Privatised public stock
Indicator HA42: Public housing production
Indicator HA43: Social rent to income
Indicator HA44: Waiting time
Indicator HA45: Operating subsidies
Indicator HA46: Administrative costs
Indicator HA47: Tenant management

Intensive indicators
Public housing stock

REGULATION

Extensive indicators
Indicator HA48: Rent control
Indicator HA49: Rental eviction delay
Indicator HA50: Lease security
Indicator HA51: Evictions
Indicator HA52: Mortgage foreclosures
Indicator HA53: Female property rights

MODULE 8. HOUSING PROVISION

Background Information

The system of housing provision is the manner or system through which housing is provided, and involves land development, the construction industry, housing finance, government involvement through taxes, subsidies and public housing, and the regulatory system. The provision system may be very different in otherwise similar countries, and accounts in most cases for the different outcomes which are to be found.

Land development, availability and ownership are often the key to understanding housing price differentials in different countries and cities. The land submodule is largely intended to apply to particular urban areas, but can be used for urban areas as a whole. The key indicator in the land submodule is firstly the **Land development multiplier**, which measures the price premium associated with servicing a block. This includes not just the value of the services, but any premium associated with bottlenecks in the development process. , The second key indicator is the **Infrastructure expenditure** per capita by all providers, since this is a major determinant of the physical services provided to land. Alternative indicators include developed **Land availability**, which measures potential land shortages, and the **Planning permission land price multiplier**, which measures the difference in value between land with planning permission, and land without such permission. The percentage of urban land covered by **Formal land transactions** is vital in determining the operations of the market, since without a system establishing ownership, most of the mechanisms of a formal housing market cannot operate. The **Development time** for land is often a major restriction on availability, while **Minimum lot size** is a constraint on the usage of land for housing. **Cost recovery** indicator measures the percentage recovery of expenditures by service providers from developers or households. Finally, **Land development controls** is a composite of questions on land and building regulations.

The second major constraint on housing market activity is finance. Because housing is an expensive purchase beyond the reach of the majority of households, the availability of finance is a necessary part of ensuring access to owner-occupancy, and where finance is not adequately available to particular groups, housing ownership will be severely restricted. Producers of housing also are critically dependent on finance to enable efficient land development and construction. The key indicator of access to finance is the **Mortgage-to-credit ratio**, which measures the proportion of borrowings held as housing finance, and the extent of development of formal housing finance.

The extensive indicators include two global estimates of the role of housing finance, the **Credit-to-value ratio**, which measures the ratio of mortgage holdings to total property value in housing, and **Housing loans**, which measures the proportion of dwellings with a formal-sector mortgage of some kind. The efficiency of the financial system can be measured by interest rate differentials such as the **Mortgage-to-prime difference** and the **Mortgage-to-deposit difference**. The **Arrears** rate measures potential defaults and difficulties experienced by borrowers in meeting repayments, while the access of women to finance is measured by the **Mortgage loans for women** ratio.

Construction One measure of the success of a shelter sector is whether housing is supplied in sufficient quantity to meet demand pressures as they arise, and at an affordable cost. The key indicators of construction activity are **Housing production** and **Housing investment**, which measure the number of units produced and the macroeconomic contribution of residential

building to investment. Alternative indicators measure the efficiency of the construction sector in terms of **Construction cost** and **Construction time** for a standard dwelling, along with average **On-site productivity** per square metre. **Industry concentration** describes the competitive structure of the industry, while **Construction employment** and **Wage employment** examine the structure of the labour force in residential building.

Taxes and subsidies The housing sector, as a productive part of the economy, should normally be a net contributor to the budget. The extent to which each tenure contributes to or is subsidised by the government is measured by the **Effective taxation rate**. The direct budgetary contribution of governments to the housing sector is defined by the **Nett housing outlays** indicator. The **Property tax rate** describes direct taxation on residential property.

The major way in which most governments are involved in the housing sector, particularly for low income earners, is through public housing. The contribution of the public sector to the direct provision of dwelling units is measured by **Public housing stock** and by **Privatised public stock**. The latter indicator is particularly important for transitional economies, and for other countries with a substantial sales programme, to show how public housing has contributed to the total stock. The contribution of the public sector to new production is **Public housing production**.

Measures of access to and affordability of public housing include **Waiting time** and **Social rent-to-income**. Operational sustainability is measured by **Operating subsidies** and by **Administrative costs**, while **Tenant management** considers the involvement of the tenant population in management of their dwellings.

The important role of legal and regulatory frameworks covers all aspects of provision. Regulation of the private rental market through **Rent control**, **Rental eviction delay**, **Lease security** and **Evictions** are important measures which affect both the security of tenants and the willingness to invest by landlords. **Mortgage foreclosures** are also a major security concern for owner-purchasers and for lenders. **Female property rights** ascertain the access of women to land ownership and to finance, major gender equity issues.

List Major Issues:

1...
....
....
2...
....
....
3...
....
....

LAND

Key indicators

Indicator H6: Land development multiplier | % |
|----|

Defined as the ratio between the median land price of a developed plot at the urban fringe in a typical subdivision and the median price of raw, undeveloped land in an area currently being developed (ie with planning permission).

This indicator measures the premium for providing infrastructure and converting raw land with planning permission to residential use on the urban fringe. It reflects in part the extent to which windfall profits exist in developing land for housing as a result of bottlenecks in infrastructure provision. It is thus an indirect measure of the availability of infrastructure, as well as the complexity of the development process. It also measures indirectly the existence of monopolistic practices in residential land development. A high value for this may be a sign that there are shortages of urbanised land for housing.

The comparison should be between raw land and serviced land in an area where residential development is <u>allowed</u>, i.e. where planning permission is given and zoning regulations for residential development are in effect. Where land subdivisions are not common, the comparison should be between an unserviced and a serviced plot of land located on the fringe of the urban area.

    A.   The median price of one square meter of raw land that has not been subdivided, and with no roads, electric, water, or sewage services, in an area of the urban fringe undergoing active development:

(i) _____ per sq. meter.

    B.   The median price of one square meter of a building plot in a development which has been subdivided and provided with road access, electric, water, and sewage services, in an area of the urban fringe undergoing active development:

(ii) _____ per sq. meter.

Average prices should be used where medians are difficult to calculate. Prices refer to a typical 50-200 unit subdivision on the urban fringe.

Indicator H7: Infrastructure expenditure	$

Defined as the ratio of total expenditures in US dollars by all levels of government (including private utilities and parastatals) on infrastructure services during the current year, and the urban population.

This indicator is designed to measure typical or normal expenditures on infrastructure per year. The indicator properly belongs as part of the infrastructure module in Volume II, but it has traditionally been a key housing indicator, so has been retained here. Total infrastructure expenditure interacts strongly with new land development and construction, and also with improved access to services by households. Low levels of infrastructure expenditures result in land supply bottlenecks and thus in higher prices for land and housing. They also result in inadequate provision of residential amenities, such as water, sewerage, drainage, electricity, and transportation facilities all of which can affect the quality and price of housing.

Infrastructure includes operations, maintenance, and capital expenditures on physical infrastructure such as urban roads, railways, sewerage, drainage, water supply, electricity, and garbage collection, but not social infrastructure such as health and education expenditure.

Infrastructure expenditures are comprised of three major components, recurrent expenditures (operations, maintenance, salaries, etc.), debt service, and depreciation. If there were unusually high capital expenditures during the last year for which figures are available, only their first year depreciation should be calculated as expenditure in the current year. If, for example, there was a large capital investment project budgeted in 1993 which will distort this indicator, include only 10 per cent of this investment as recurrent expenditures, assuming depreciation rate of ten percent per year.

Figures for this indicator should be obtained from expenditure accounts of local and central governments. Only real out-of-pocket costs or real transfers should be counted as expenditure. If debts (e.g. to the central government) are not actually paid, or depreciation payments are not actually transferred to a sinking fund, they should not be counted as expenditures.

Data sources:

Notes: (Background, geographical area, method of calculation, time period, other).

Extensive Indicators:

Indicator HA18: Land availability.

months

Defined as the number of serviced blocks currently available divided by the present construction rate in dwellings per month (annual average).

This indicator measures the number of months of serviced land available at present rates of construction (formal sector only). A shortage of developed blocks will generally herald a series of price rises, and represents a severe constraint on construction. The availability of land is a major determinant of house price-to-income in the longer term.

Indicator HA19: Planning permission multiplier

Defined as the ratio between the median land price of an unserviced plot on the urban fringe given planning permission for residential development, and the median price of a nearby plot in rural/agricultural use without such permission.

This indicator measures the premium associated with obtaining planning permission for residential development on the urban fringe. Alternatively, it measures the degree to which planning permission functions as a mechanism for rationing urban land. A high value for this indicator means that planning permission creates artificial shortages of land for housing, often resulting in unnecessarily high prices of land and therefore of housing.

Note that this indicator refers to the premium associated with zoning permission. It does not include the premium associated with infrastructure provision, which is measured by the previous indicator. These two indicators taken together measure the premium of serviced, zoned land over raw agricultural land.

Data sources:

Notes: (Background, geographical area, method of calculation, time period, other).

Indicator HA20: Formal land transactions. | % |

Defined as the percentage of the metropolitan area covered by a land registration system which allows for buying, selling, long-term leasing, or mortgaging urban land.

This indicator is intended for cities, and measures the extent to which the urban land market is organised as a legitimate market. The higher the percentage of the metropolitan land area covered by land registration, the more easily land and property can be exchanged on the market.

Urban land area should include the urban area, nett of any water area.

Indicator HA21: Development time. | months |

Defined as the median length in months to get approvals, permits, and titles for a new medium-sized (50-200 unit) residential subdivision in an area at the urban fringe where residential development is permitted.

Regulatory delays raise land and housing costs and may affect the organisation of the construction industry. This indicator is designed to measure one of the most significant aspects of these costs.

Data sources:

Notes: (Background, geographical area, method of calculation, time period, other).

Indicator HA22: Cost recovery.	%

Defined as the percentage of total infrastructure costs recovered from new developments during the year.

Infrastructure costs should include networked infrastructure, roads, and social infrastructure such as schools, community centres, recreational land etc. Major infrastructure costs which are not location-specific, such as dams, should not be included. If the total figures are not available for all developments, then the ratio should be estimated from a typical development.

Increasingly, cost recovery principles are being applied in residential developments, through developer contributions and direct contributions by residents. This allows infrastructure providers sufficient funds to continue their work, and reduces reliance on central governments for infrastructure funding. As well, it causes new developments to pay the full social cost of city expansion, which promotes efficient development. However, the procedure leads to some inequities against previous generations who did not pay the full cost.

Indicator HA23: Minimum lot size.	%

Defined as the minimum lot size for a single family housing unit in a new 50-200 unit residential subdivision.

This indicator measures the degree to which large lot subdivision regulations limit the capacity of the private sector to provide low-cost housing. In general, the smaller the minimum lot size, the better able are developers to provide low-cost dwelling units. Larger minimum lot sizes may result in higher infrastructure costs associated with urban sprawl.

Data sources:

Notes: (Background, geographical area, method of calculation, time period, other).

Indicator HA24: Land development controls

Defined as a composite of questions on land use and building code regulations

Where different rules apply in different parts of the country or city, use the median or most common rule.

1. The minimum floor space per dwelling unit for private sector construction is:

....
sq. metres

2. The maximum allowable ratio of floor area to land area on residential plots is

....

3. Is medium or higher density housing subject to special regulations which limit its construction or increase its cost relative to single family housing? ☐Yes ☐No

4. Have building and land subdivision regulations been revised to reflect affordability constraints of low income groups? ☐Yes ☐No

5. Are there special norms and standards for low income groups in new residential developments? ☐Yes ☐No

6. Are there regulations to preserve agricultural land around cities (for example, restriction on conversions, or highly favourable tax treatment)? ☐Yes ☐No

7. Is there a tenure regularisation programme for urban squatters? ☐Yes ☐No

8. Is there a land banking programme where the government buys and holds private land in anticipation of future development? ☐Yes ☐No

9. Are there restrictions on the conversion of residential units to non-residential use? ☐Yes ☐No

10. Is there a legal distinction between urban land and rural/agricultural? ☐Yes ☐No

Data sources:

Notes: (Background, geographical area, method of calculation, time period, other).

Intensive indicators

This indicator is intended for a specific city.

> **Indicator HB1: Land price gradient:**
>
> Defined as the level of real residential land prices in US dollars per square metre, in relation to distance from the city centre.

This is a schedule of land prices plotted against distance of land from the city centre (Central Business District). If the city does not have a centre, then the General Post Office or central railway station may be used.

The indicator measures the unit cost of land used for residential purposes, in current US dollars per square metre. Both the price level and the rate at which land prices decline with distance from the city help to determine the residential structure of the city, and are associated with the location of employment, the extent of land use controls, energy pricing, and the adequacy of infrastructure networks.

Note that dollar costs in the past should be converted to latest year values.

Graph 1: Time series 1974-1994

This graph should include comparisons of the Land price gradient for the period 1974-1994 for selected cities.

An example of such a graph is given below.

Land Price Gradient
1974-1994
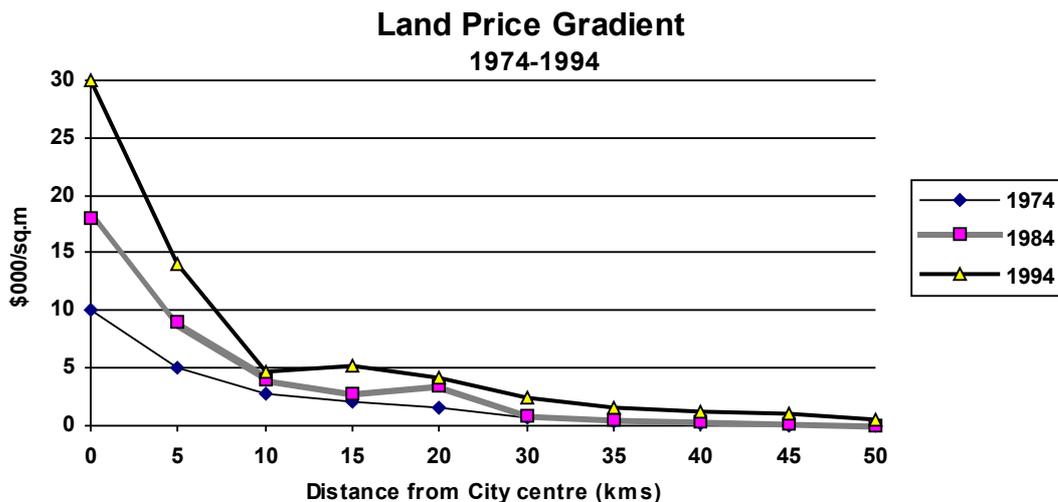
FINANCE

The previous Land module was largely intended to be collected for a particular urban jurisdiction. On the contrary, many of the indicators of housing finance are macroeconomic and can only be collected for the country as a whole.

Definition:

Housing loan The indicators in this submodule refer specifically to loans from the formal financial sector to households. In general, a loan should be included if its originator is a formal financial intermediary and the final recipient is a household or individual which uses it for long-term occupancy whether it is secured by the property or not. Group loans to cooperatives which are used for housing for cooperative members and block loans to developers which are passed on to purchasers should be included. Non-financial intermediaries such as employers who provide credit for housing are specifically excluded.

Key indicators

Indicator H8: Mortgage to credit ratio | %

Defined as the ratio of total mortgage loans to all outstanding credit in both commercial and government financial institutions.

The Mortgage to credit ratio is a measure of the relative size of the housing finance sector and its ability to provide households with the funds necessary to smooth their consumption patterns over time. If mortgages form only a small part of total credit, it is quite likely that housing finance institutions are poorly developed, or face legal or institutional constraints making it difficult for them to meet the demand for housing finance.

Total credit will be available from reports of the Reserve Bank or similar. Total housing finance will be available from the Reserve Bank, from statistical offices, national housing finance institutions or from the mortgage lending institutions or regulators. For outstanding credit, include total credit from commercial and government banks and non-bank lenders.

For housing credit include total outstanding mortgage credit held by:

1. commercial banks:...
2. merchant banks:...
3. trust companies:...
4. savings and loans:...
5. government agencies:...
6. quasi-government institutions:...
7. insurance companies:...
8. credit unions:...

Data on total outstanding credit and outstanding housing credit will most likely only be available at the national level. If this indicator is to be collected at the city level, particularly

where the national and city data are significantly different, then it is necessary to correct the national data.

One possible way to accomplish this is to multiply the national totals by the percentage of the urban population residing in the city in question, presuming that most housing loans are in urban areas. However, then the indicator will be the same for all cities. Indicator HA26: Housing loans may be used for a better approximation, particularly if expenditure data on mortgages is also available from a household survey. Then

$$M_c = p_c/p_n \times m_c/m_n \times H_c/H_n \times M_n$$

where M_c, M_n are the outstanding mortgages in the city and nationally
p_c, p_n are the average city mortgage repayments and average repayments nationally
m_c, m_n are the proportions of dwellings with mortgages in the city and nationally
H_c, H_n are numbers of dwellings in the city and nationally.

Total outstanding credit is more difficult to calculate at the city level, since many loans are to or between institutions and are national-level transactions. While loans to individuals may be adjusted by the same procedure as for housing mortgages, institutional loans can only be allocated on a population basis.

Data sources:

Notes: (Background, geographical area, method of calculation, time period, other).

Extensive indicators

Indicator HA25: Credit to value ratio   [%]

Defined as the ratio of new mortgage loans for housing last year to total investment in housing (in both the formal and informal sectors) last year.

This indicator measures the availability of mortgage credit for new housing investment, and measures the effectiveness (or attractiveness) of mortgage finance. For developing countries it measures the level of development of the mortgage sector; for developed countries it measures the extent to which buyers prefer to use own equity as compared to mortgages.

For estimates of housing investments, use Indicator H10: Housing investment, in the Construction submodule. Total new mortgage credit can be summed as

Total mortgage credit in the past year issued by:
1. commercial banks:..
2. merchant banks:...
3. trust companies:..
4. savings and loans:...
5. government agencies:...
6. quasi-government institutions:..
7. insurance companies:..
8. credit unions:...

Indicator HA26: Housing loans   [%]

Defined as the proportion of dwellings that have housing loans from the formal financial sector.

Access to a comprehensive formal financial sector is most simply measured by proportion of houses (both owned and rented) which have loans. In the absence of specific survey or census data, it may only be possible to determine loans which are secured by the property.

In general, public housing should not be regarded as having loans unless these are secured by the property.

Indicator HA27: Mortgage-to-prime difference   [%]

HOUSING
PROVISION

Defined as the average difference in percentage points between interest rates on mortgages in both commercial and government financial institutions and the prime interest rate in the commercial banking system.

To encourage development of housing finance institutions, they should be able to compete for deposits on even terms with other financial institutions, lend at positive real interest rates, be permitted to provide mortgage lending instruments in demand by households, and have their interests protected by an adequate system of property rights and the existence of public or private institutions which insure against undue mortgage lending risk. In a well-functioning housing market, the value of this indicator should be only slightly higher than the prime interest rate. A high value for this indicator suggests a shortage of finance for housing, regulatory barriers, or inefficient banking practices in mortgage lending. A negative value, which is the case in many countries, suggests that mortgage rates are being regulated to low levels or are subsidised, or that mortgage lenders have access to sources of funds which are substantially cheaper than those available to commercial lending institutions.

The prime interest rate is defined as the lowest interest rate given to preferred borrowers in the commercial banking system. An alternative is the ninety-day long term bond rate.

Indicator HA28: Mortgage-to-deposit difference   %

Defined as the average difference in percentage points between interest rates on mortgages in both commercial and government financial institutions and the interest rate on one-year deposits in the commercial banking system.

In a well-functioning housing market, the value of this indicator should be positive with mortgage rates only modestly higher than deposit rates. A negative value for this indicator suggests that lending institutions cannot be sustained for long. A high value, on the other hand, suggests that financial institutions are inefficient, that housing loans are seen as risky, that competition for loans is restricted by regulations or by monopolistic practices, or that demand for mortgages far exceeds the available supply.

Data sources:

Notes: (Background, geographical area, method of calculation, time period, other).

Indicator HA29: Arrears rate

	%

Defined as the percentage of mortgage loans which are three or more months in arrears in both commercial and government financial institutions.

This indicator is indicative of the financial viability of mortgage lending. A high level of arrears is typically associated with loan defaults and financial losses by lending institutions, which discourage the growth of lending for housing.

Indicator HA30: Mortgage loans for women

	%

Defined as the percentage of mortgage loans granted to women to all mortgage loans made last year.

This indicator is designed to measure access by women to mortgage finance and credit. If mortgage loans to women form only a small part of total mortgages made, there may be legal or institutional constraints affecting access to mortgage finance. A low value for this indicator might reflect latent demand on the part of women for more or better access to housing finance.

Data sources:

Notes: (Background, geographical area, method of calculation, time period, other).

Intensive indicators

The Intensive Review of this submodule requires comprehensive indicator data for two indicators, Indicator HA25: Credit to value ratio and Indicator HA28: Mortgage-to-deposit difference

---

Indicator HA25: Credit to value ratio

%

Defined as the ratio of mortgage loans for housing last year to total investment in housing (in both the formal and informal sectors) last year.

Graph 1: Time series 1974-1994

This graph should include time series information on the credit-to-value ratio covering the period 1974-1994, at the national level.

Indicator HA28: Mortgage-to-deposit difference

%

Defined as the average difference in percentage points between interest rates on mortgages in both commercial and government financial institutions and the interest rate on one-year deposits in the commercial banking system.

Graph 1: Time series 1974-1994

This graph should include time series information on the credit-to-value ratio covering the period 1974-1994, at the national level.

Data sources:

Notes: (Background, geographical area, method of calculation, time period, other).

CONSTRUCTION

Key indicators

Indicator H9: Housing production. | % |

Defined as the net number of units produced (units produced minus units demolished) last year in both the formal and informal sectors per 1000 population.

This indicator is a traditional measure of the ability of the housing supply system to increase and replenish the urban housing stock. It should measure new units completed plus subdivisions of existing units, less demolitions and conversions to other usages.

Both the construction of new informal units, and demolitions and conversions, may be difficult to estimate from any formal source, and it may be necessary to rely on informed estimates from professionals in the area.

Indicator H10: Housing investment | % |

Defined as the total investment in housing (in both the formal and informal sectors) as a percentage of gross national, total urban or city product.

This indicator measures the proportion of aggregate economic activity devoted to housing investment. It is an indirect measure of housing supply, incorporating both quantities produced and prices. A higher level of housing investment will usually indicate high levels of housing production for a given level of house price-to-income ratios. Rapidly increasing prices relative to incomes, however, may also result in higher levels of housing investment, but may be associated with smaller quantities produced.

Investment in housing includes value of work done on new construction, alterations and additions, but not repairs or the purchase of existing housing.

Note that the denominator is the GNP or the City Product, as defined in Volume II.

Data sources:

Notes: (Background, geographical area, method of calculation, time period, other).

Extensive Indicators:

Indicator HA31: Construction cost.	%

Defined as the present replacement cost (labour, materials, on-site infrastructure, management and contractor profits) per square meter of a median priced dwelling unit.

This indicator is a measure of the efficiency of the housing supply system. When construction costs are high relative to incomes, it may be a sign of monopolistic practices in the housing sector, of shortages of capital inputs, of inappropriate building technology, or of shortages of skilled labor.

Note that this indicator refers to a median-priced new dwelling unit, not a median priced existing unit as calculated in Indicator H1: House price to income ratio. If more than 50% of units under construction are informal, then it will be an informal sector dwelling.

Indicator HA32: Construction time.	months

Defined as the average time, in months, required to construct a median housing unit.

This indicator is a measure of the efficiency of the construction process. Often, when housing delivery systems are not working well because of shortages of building materials, finance, skilled labor, or other inputs, or because of regulatory lags, housing may take considerably longer to complete.

A median-priced typical new housing unit should be used to estimate this indicator. If this unit is part of a larger building, then the construction time for completing the larger building should be used as Construction Time. If no new median-priced units are currently being produced, then a new unit with a price closest to the median price should be used.

Data sources:

Notes: (Background, geographical area, method of calculation, time period, other).

Indicator HA33: On-site productivity.	$

Defined as the man-hours per square metre on a typical median-priced dwelling in the formal construction sector.

This is a traditional measure of the value of work done by on-site workers for purposes of national and international comparison, and it can vary considerably between similar countries depending on the type of technology employed, the quality of housing, the physical site conditions and the organisation of the workforce.

Data can be obtained from on-site surveys or by dividing total value of work done by the total hours worked on-site in the residential building industry.

Indicator HA34: Industry concentration.	%

Defined as the percentage of new formal-sector housing units placed on the market by the five largest developers (either private or public) last year.

This indicator measures the competitiveness of and ease of entry into the housing industry. A high value for this indicator suggests monopolistic practices in the sector, and may explain higher than expected house prices. Industrial concentration may be the result of regulatory barriers to entry, long delays in obtaining permits for land and housing development, or shortage of entrepreneurial talent.

The indicator is intended to measure the concentration of companies or institutions which control and manage the financing, construction, and especially the marketing of housing. They need not construct the units themselves.

Data sources:

Notes: (Background, geographical area, method of calculation, time period, other).

Indicator HA35: Employment.	%

Defined as the percentage of all employment that is engaged in the construction of residential dwelling units.

This indicator measures the degree to which residential construction activity is translated into employment. In many countries the construction sector is a large and growing part of the economy, with important macroeconomic linkages, many of which are related to this indicator.

Employment includes both on-site and off-site employment; ie all employees and principals of firms and agencies that have residential construction as their main activity.

Indicator HA36: Wage labour.	%

Defined as proportion of on-site building employees who are employed as wage labour.

The building industry is organised very differently in different countries. In some countries, most building work is undertaken by owner-proprietors of small building firms together with subcontracted tradesmen who are self-employed. In other countries, most housing is built by day labour forces who are paid wages. There is reason to believe that subcontracted building has higher productivity than day labour, which results in lower costs for the consumer.

On-site building employment excludes owner-builders. Wage labour includes on-site employees who are paid a wage or salary. It does not include subcontractors or working proprietors of building firms.

Data sources:

Notes: (Background, geographical area, method of calculation, time period, other).

Intensive Indicators:

.

The Intensive Review of this module calls for the collection of comprehensive indicator data for three indicators: **Indicator H9: Housing production;** Indicator H10: Housing investment**; and Indicator C2: Housing starts**.

Indicator H9: Housing production.

Defined as the net number of units produced (units produced minus units demolished) last year in both the formal and informal sectors per 1000 population.

The Intensive Review of this indicator should include one associated graph:

Graph 1: Time Series, 1974-1994

This graph should include time series information on **Housing Production** covering the period 1974-1994 at

a.   the national level;
b.   the urban population;
c.   the rural population; and
d.   selected cities.

Indicator H10: Housing investment

Defined as the total investment in housing (in both the formal and informal sectors in the urban area) as a percentage of gross national or city product.

The Intensive Review of this indicator should include one associated graph:

Graph 1: Time Series, 1974-1994

This graph should include time series information on **Housing Investment** covering the period 1974-1994 at

a.   the national level

> **Indicator HB2: Housing starts**
>
> Defined as the annual number of housing starts (formally registered units).

Housing starts is a commonly used leading indicator which relates to other economic indicators such as investment in industries linked to the housing sector, employment, and prices.

Graph 1: Time Series, 1974-1994

This graph should include time series information on **Housing Starts** covering the period 1974-1994 at

a. the national level;
b. the urban level;
c. the rural level; and
d. selected cities.

SUBSIDIES AND TAXATION

Taxes on housing are often a major source of revenue for governments. The structure of these taxes affects the price of housing, incentives for ownership and investment, affordability, mobility, and the operation of markets. Housing taxes usually incorporate a complex system of exemptions which may or may not benefit lower income households.

The housing market may exclude low-income groups from obtaining adequate housing without some form of government assistance or subsidy. Some types of assistance, such as housing allowances, appear on government budgets and are clear-cut. Others, like tax exemptions or interest rate concessions, are off-budget subsidies which allow for a better return on housing investment than could normally be expected from similar assets.

Extensive Indicators:

Indicator HA37: Effective taxation rate by tenure

a. Owner
occupied | $

b. Private
rental | $

c. Public
housing | $

Defined as the nett annual housing-related taxation per dwelling paid by households to governments, in US dollars.

Rather than attempting to measure subsidies, which depend on benchmark estimates of what is a 'normal' taxation system or normal interest rate regime, this indicator looks at the converse, the nett taxes paid by each tenure type. Negative numbers represent subsidies or negative taxes.

A. Total taxes or subsidies in US dollars per annum

Tax type	Owner-occupied	Private rental	Public housing
Income tax	-		-
Property tax			
Stamp duties			
Direct housing transfers	-	-	-
Subsidised rentals		-	-
Subsidised or regulated interest rates	-		

B. Number of dwellings

Owner-occupied	Private rental	Public housing

Income taxes on housing include taxes on rent paid by landlords, and any negative offset through tax deductions for interest payments by owner occupiers. Deduction of company provided housing from corporate income tax (in terms of taxation foregone on the rental value of the properties) should also be included as a negative offset. Similarly, deductions for tax-exempt bonds for financing public housing should be included as a negative tax or subsidy.

<u>Property tax</u>. Any property or land taxes payable to any level of government.

<u>Stamp duties</u>. Stamp duties or other government charges on the transfer of property or on mortgages.

<u>Direct transfers</u> include housing allowances, deposit assistance or any other direct payments to households for housing purposes.

<u>Subsidised rentals</u> are the difference between rents actually paid and the estimated market rental value of the stock. It applies to both public and government employee housing. An estimate of the reduction in rent for rent-controlled private dwellings should also be included.

<u>Subsidised or regulated interest rates</u> are the (negative) difference between interest paid on any Subsidised housing loans or loans regulated at below-market rates, and the amount of interest that should have been paid if market interest was charged. The market interest rate can be taken to be the 90-day bond rate, or the prime lending rate. Positive amounts should not be included here if housing lending rates are higher than the prime rate.

Estimates should generally err on the side of conservatism, where there is a choice between different methods of calculation.

Data sources:

Notes: (Background, geographical area, method of calculation, time period, other).

Indicator HA38: Nett housing outlays by government.	%

Defined as the total expenditure by all levels of government on housing in the current year, nett of all housing related receipts from the public, taken as a percentage of total government expenditure.

This measures the <u>nett contribution</u> of all levels of government to housing, as a fraction of total government budgets. It is the major indicator of the current importance placed by governments on housing in the budgetary context.

Expenditures can include capital or operating expenditures on public housing, nett of sales receipts or rent payments; any housing-related transfers to the public, such as housing allowances or home deposit assistance, government housing loans, net of principal and interest repayments, and other housing expenditures such as building shelters or hostels. Only transfers to individuals should be included, not intergovernmental transfers. Similarly, total government budgets should be both capital and recurrent expenditure, but in the case of collection of this indicator for a city, should include only expenditures within the city, and should not include intergovernmental transfers. Note that any payments to the government, such as loan repayments or house sales, should be subtracted from the total.

Data sources:

Notes: (Background, geographical area, method of calculation, time period, other).

Indicator HA39: Property tax rate.	%

Defined as the percentage of the market value of the median-priced dwelling unit which is collected as annual property tax.

Local property taxes can serve as a significant source of revenue in financing local public expenditures. The level of property taxation generally reflects the extent of services provided by local governments. If property tax rates are low relative to market values, incentives for holding land off the market and failing to redevelop property will be considerable, resulting in speculative property holding and restrictive supply of land and housing. If, on the other hand, property tax rates are relatively high, especially if structures and land are taxed at similar rates, investment in housing may be discouraged.

As taxes vary between jurisdictions, the median or most common tax rate should be used.

Property taxes are a fairly regressive form of taxation as property values are generally less variable than incomes.

Data sources:

Notes: (Background, geographical area, method of calculation, time period, other).

PUBLIC HOUSING

Extensive Indicators:

Indicator HA40: Public housing stock

%

Defined as the percentage of the total number of dwelling units in the urban area that is owned, managed and controlled by the public sector.

This indicator measures the level of participation of the public sector in housing development. A high level of public sector participation usually implies a less developed private sector. In some countries, Singapore and Hong Kong being the most important exceptions, this can lead to supply bottlenecks and to housing shortages.

Indicator HA41: Privatised public stock.

%

Defined as the percentage of the total number of dwelling units previously constructed or managed by the public sector that have been privatised.

In a number of places, much of the stock has been constructed by the public sector but later sold to tenants. This indicator measures the extent of this process, and the total impact that the public sector has had on housing construction in the past.

Privatisation in this context involves transfer to private ownership or to management and control by private organisations, including cooperatives.

Data sources:

Notes: (Background, geographical area, method of calculation, time period, other).

Indicator HA42: Public housing production.	%

Defined as the total production of public housing units as a fraction of all formal housing units produced during the year.

This indicator measures the contribution to current production made by the public sector.
A high level of public housing construction may imply that the private construction sector is not well-developed and unable to meet the demands of the population. Alternatively, where average incomes are very low, public housing may be the only means of providing affordable formal housing to low income households.

Indicator HA43: Social rent to income.	%

Defined as the ratio of the median annual rent of a public housing dwelling unit and the median household income of renters of public housing.

This indicator is a proxy measure of the depth of government subsidies for public housing tenants. When this indicator is low relative to Indicator H2: House rent to income ratio, it may show that public housing is successful in reducing housing costs for low-income tenants, but if too low, it may show that costs are not being met

Median public housing rent per year	$_____
Median annual income of public tenants.	$_____

Data sources:

Notes: (Background, geographical area, method of calculation, time period, other).

Indicator HA44: Waiting time.	months

Defined as the average time on waiting lists before allocation of public housing units.

The waiting time for public housing is a typical measure of expressed demand for public housing relative to the current rate of provision. However, where the public housing stock is limited or inadequate, public housing waiting lists tend to be short since prospective tenants are aware that their chances are low or that they are unlikely to receive a suitable property. The indicator is therefore not a true measure of need.

The indicator is simply calculated by dividing persons on the total waiting list for public housing by the monthly allocation rate (annual average).

Indicator HA45: Operating subsidies.	%

Defined as the ratio of rent payments to operations costs for public housing.

This indicator seeks to measure to what extent rents in the public housing sector cover operating and maintenance costs. Where rents fall below maintenance costs the remaining costs are borne by the public sector. This could indicate inefficient management of the dwelling unit, insufficient cost recovery or simply a generous subsidy policy.

Rent payments should be net rents actually received from tenants (ie net of any subsidy allowance) while operations costs include administration, maintenance, upkeep, security and property taxes, but not interest payments or depreciation allowances.

Data sources:

Notes: (Background, geographical area, method of calculation, time period, other).

Indicator HA46: Administrative costs. | % |

Defined as the administrative cost of operating public housing taken as a fraction of the estimated market rental value of the dwellings.

This is a measure of the efficiency of providing public housing. Typical administrative costs for public housing are about 10-15% of market rent.

Only administrative costs should be included and not maintenance, upkeep, user charges or depreciation.

Indicator HA47: Tenant management. | % |

Defined as proportion of the social housing stock managed by tenants, completely, partly or jointly.

Housing in cooperatives is generally managed by groups of tenants. General public housing often has no tenant involvement in management. In intermediate systems, tenants have a voice in management committees or in maintenance committees.

Data sources:

Notes: (Background, geographical area, method of calculation, time period, other).

Intensive Indicators:

The Intensive Review of this module calls for the collection of comprehensive indicator data for one indicator: **Public Housing Stock**.

Indicator HA40: Public housing stock

Defined as the percentage of the total number of dwelling units in the urban area that is owned, managed and controlled by the public sector.

The Intensive Review of this indicator should include one associated graph:

Graph 1: Time Series, 1974-1994

This graph should include time series information of the **Public Housing Stock** covering the period 1974-1994 at

a.   the national level;

b.   the urban population;

c.   the rural population; and

d.   selected cities.

Data sources:

Notes: (Background, geographical area, method of calculation, time period, other).

REGULATION

Extensive Indicators:

Indicator HA48: Rent control.	%

Defined as the percentage of the rental stock, including public housing and informal rentals, under the coverage of a rent control system.

This indicator measures the pervasiveness of rent control and is likely to be associated with differences in housing prices, quality, and the responsiveness of the housing delivery system to shifts in demand.

The indicator refers to a formal rent control system where rents cannot be raised without approval of some government body. A system where tenants can only appeal against excessive rent rises is not regarded as rent control.

Indicator HA49: Rental eviction delay.	%

Defined as the typical time in months, (from the initial proceedings, required) to evict a rental tenant for non-payment of rent.

This indicator is a measure of the efficiency and effectiveness of the eviction process in rental accommodation. Where this value is high, beyond a reasonable value which protects the rights of tenants, there is a reluctance on the part of potential builders of rental units to build new rental housing, a pattern which may constrain the supply of rental housing.

Indicator HA50: Lease security.	%

Defined as the proportion of private rental households who have a formal lease agreement with their landlord.

Generally, tenants with a formal lease have considerably more protection against eviction, harassment and arbitrary rent rises than households with only an informal agreement, who may be given almost no notice before eviction. Landlords also may be protected by a formal rent agreement and given security of rental income streams.

Indicator HA51: Evictions.	

Defined as the average annual number of households evicted from rental dwellings and squatter dwellings during the past five years.

In developing countries the major component of this indicator will be squatter evictions. In many countries, governments have chosen to allow long-term squatter settlements to remain in place, improved infrastructure, and secured land tenure thereby allowing the residents to invest more in improving their housing. In other countries, however, eviction continues unabated. This indicator measures the degree to which this practice is still in force. Because eviction is usually irregular and intermittent, the value for this indicator is an average over the last five-year period.

In developed countries the indicator will refer largely to evictions for non-payment of rent, and will measure affordability conditions and the availability of legal recourse by landlords.

Indicator HA52: Mortgage foreclosures.

Defined as the annual number of foreclosures per 10000 registered mortgages. .

This measures the number of households who are unable to meet their mortgage payments, generally due to changed individual circumstances or increased interest rates. It also measures the availability or otherwise of social safety nets for households in trouble with their mortgage.

Data sources:

Notes: (Background, geographical area, method of calculation, time period, other).

Indicator HA53: Female property rights.

Check boxes if:

B54.1. There are impediments to women owning land

Considerable ☐   Some   ☐   None ☐

Impediments include both legal or traditional barriers to land ownership which affect a significant proportion of the land area (eg in excess of 5%).

B54.2. There are impediments to women inheriting land and housing.

Considerable ☐   Some   ☐   None ☐

Impediments include both legal or traditional barriers to inheritance by women which affect a significant proportion of the land area (eg in excess of 5%).

B54.3. There are impediments to women taking mortgages in their own name.

Considerable ☐   Some   ☐   None ☐

Impediments include both legal or institutional impediments for women, including requirements for guarantors, higher interest rates, down-payment or deposit requirements, or loan limits which are different from those applying to men of similar incomes and wealth.

Data sources:

Notes: (Background, geographical area, method of calculation, time period, other).