



RESEARCH ARTICLE

Housing Shortages in Rural India

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Abstract: The right to adequate housing is recognised as a basic human right by the United Nations and its constituent bodies. Although India is a signatory to many international covenants in this regard, it has neither a rural housing policy nor mechanisms to monitor the realisation of the right to adequate housing. This paper examines the methodology used by the Working Group on Rural Housing for the Twelfth Five-Year Plan established by the Planning Commission of India to estimate the housing shortage in rural India. We argue that the methodology of the Working Group, which focussed only on the material used for roofs and walls, was inadequate and that their estimate of the housing shortage in rural India a severe underestimate. We use data from 15 village surveys to estimate the number of households that live in houses that are built of pucca material, have two rooms, an electricity connection, a source of water inside the house or immediately outside it, and a functioning latrine. (These criteria still fall well short of the quality of housing to the provision of which India is committed internationally.) In order to estimate the order of magnitude of the shortage of housing in rural India, we then apply the ratios from our village surveys to the total rural population. While the Working Group of the Planning Commission estimates the shortage of houses to be about 40 million housing units, our estimates of the shortfall in housing is of the order of 140 million units.

Keywords: Right to housing, rural housing, housing shortage, quality of rural housing, housing and amenities, India, village surveys, Planning Commission, Indira Awaas Yojana.

THE RIGHT TO ADEQUATE HOUSING

Access to adequate housing has, on different occasions and in different forums, been recognized as a human right (see United Nations 1991). Perhaps the first mention of the right to adequate housing as a commitment of governments across the world was in the Universal Declaration of Human Rights, 1948. Article 25 of the Universal Declaration of Human Rights states that

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Everyone has the right to a standard of living adequate for the health and well-being of himself and of his family, including food, clothing, housing and medical care and necessary social services (United Nations 1949).

The United Nations and its agencies, including the World Health Organisation, the United Nations Human Settlements Programme (UN-Habitat), and the United Nations Human Rights Commission, and the International Labour Organisation consider access to adequate housing to be integral to the fulfillment of other basic human rights (United Nations 2009).

Various international human rights treaties and conventions refer to the right to adequate housing.¹ In general, these statements and documents work with a well-defined, integrated concept of housing. The United Nations Committee on Economic, Social and Cultural Rights General Comment No. 4 (1991) on the Right to Adequate Housing states that

The right to housing should not be interpreted in a narrow or restrictive sense, which equates it with, for example, the shelter provided by merely having a roof over one's head or views shelter exclusively as a commodity. Rather it should be seen as the right to live somewhere in security, peace and dignity (United Nations 1991).

In 1996, on the occasion of the second United Nations Conference on Human Settlements (Habitat II) held in Istanbul, the Heads of State or Government and the official delegations of countries assembled committed themselves to “the universal goals of ensuring adequate shelter for all and making human settlements safer, healthier and more liveable, equitable, sustainable, and productive” (United Nations 2006a, p. 8). The Istanbul declaration said

We reaffirm our commitment to the full and progressive realization of the right to adequate housing as provided for in international instruments. To that end, we shall seek the active participation of our public, private and non-governmental partners at all levels to ensure legal security of tenure, protection from discrimination and equal access to affordable, adequate housing for all persons and their families (United Nations 2006a, p. 15).

India is a signatory to various international treaties and covenants that endorse the right to housing. These include the Universal Declaration of Human Rights, the Convention on the Elimination of All Forms of Discrimination against Women, the Convention on the Right of the Child, the International Convention on the Elimination of All Forms of Racial Discrimination, the International Covenant on Economic, Social and Cultural Rights and the Istanbul Declaration (NHRC 2011,

¹ These include the ILO Recommendation No. 115 on Workers' Housing, 1961, the International Convention on the Elimination of All Forms of Racial Discrimination, 1965, the Convention on the Elimination of All Forms of Discrimination against Women, 1979, the Convention on the Rights of the Child, 1989, and the International Convention on the Protection of the Rights of all Migrant Workers and Members of their Families, 1990 (United Nations 2009).

p.3-4; MoRD 2013, preface). The link between India's obligations and international commitments is expressed in a document of the Ministry of Rural Development (MoRD), which says that the Ministry's

commitment of shelter for all gained further momentum when India became a signatory to the Istanbul Declaration on Human Settlement in June 1996, recognising thereby the need for access to safe and healthy shelter and basic services as essential to a person's physical, psychological, social, and economic well being (MoRD 2013, preface).

The United Nations and its affiliate bodies have formed various recommendatory, supervisory, and evaluation mechanisms to follow progress in ensuring the right to adequate housing. While India has committed itself to participation in this process, there are no mechanisms or systems in India to check progress in the provision of adequate housing in rural areas. There is no mechanism to define housing norms and standards for rural areas.² There are no schemes for the provision of rural housing in India that provide for integrated housing and amenities.

The flagship scheme of the Government of India in this regard, the Indira Awaas Yojana (IAY), is designed to provide, at best, a house structure or building (or part of a building), but not to provide a residence that has electricity, water and working sanitary facilities, or even a working latrine (these tasks are assigned to other schemes).

In 2011, the Planning Commission constituted a Working Group on Rural Housing for the Twelfth Five-Year Plan "to provide a perspective and approach on rural housing." The Report of the Working Group begins by noting the vision for rural housing provided by the Ministry of Rural Development:

Ensure adequate and affordable housing for all and facilitate development of sustainable and inclusive habitats in rural areas by expanding government support, promoting community participation, self-help and public-private partnership within the framework of Panchayati Raj. (MoRD 2011, p. 2)

The Report of the Working Group suggests measures to address "the need for *safe and sustainable* housing by all segments of the rural population." (*ibid*, p. i, emphasis added)

In this note, we examine the method to calculate the shortage of rural housing in the Report of the Working Group. We also propose an alternative computation of the demand for housing, using data from a set of 15 villages that were surveyed in depth by the Foundation for Agrarian Studies as part of its Project on Agrarian Relations in India.³ The villages were surveyed between 2005 and 2010. In all 15 villages but one, the surveys were census-type surveys of households. The selected villages belong to different agro-economic regions of the country (see Appendix Table A1).

² There is no housing policy for rural areas (see MoHUPA 2007 for the urban housing policy).

³ See <http://www.fas.org.in/pages.asp?menuid=16> for details of the surveys.

WORKING GROUP METHODOLOGY

The Working Group used two methods to estimate the shortage of rural housing in India for the period 2012-2017.⁴

The first method estimated housing shortage in the following way:

i. Take the difference between housing requirements and availability of houses:		
Number of houses - Housing stock (in numbers)	→	(A)
<i>Note:</i> Data from the Censuses of 1991 and 2001 are used to project the number of households and number of houses in 2012 and beyond.		
ii. Add the shortage that is caused by poorly constructed houses:		
A + Number of temporary (katcha) houses	→	(B)
<i>Note:</i> The Census of India defines three types of house structures: pucca (permanent), semi-pucca (semi-permanent), and katcha (temporary). A pucca house is one that has walls and roof made of permanent material. ⁵ A semi pucca (semi-permanent) house is one in which either the walls or the roof are made of permanent material, and a katcha (temporary) structure is one in which both roof and walls are made of temporary material. ⁶		
iii. Add the shortage that is caused by congestion:		
B + Congestion factor (6.5 % of total households)	→	(C)
<i>Note:</i> Congestion is defined in terms of the number of houses in which married couples do not have a separate room. According to the 2001 Census, in 6.5 per cent of households couples did not have a separate room to themselves. This is defined as the congestion factor.		
iv. Add shortage due to obsolescence:		
C + Obsolescence factor (4.3% of all households)	→	(D)
<i>Note:</i> An obsolescent house was defined as a house that was either more than 80 years old or between a life span of 40 and 80 years old but of bad quality. According to the 58th Round of NSSO, 4.3 per cent of households lived in obsolete houses.		
v. As D is an estimate of the housing shortage for 2012, the additional housing requirement between 2012 and 2017 was estimated as follows:		
D + (projected increase in households between 2012 and 2017 - projected increase in housing stock between 2012 and 2017)	→	(E)

Using this method, the final estimated housing shortage was 43.12 million in 2012 and 43.67 million in 2017 (see Table 1).

⁴ The National Sample Survey uses the terms pucca, semi-pucca, and katcha housing to indicate permanent, semi-permanent, and temporary housing; the Census of India uses the terms permanent, semi-permanent, and temporary housing; and the Working Group uses the terms pucca, semi-pucca, and temporary housing.

⁵ Permanent (pucca) material include cement, concrete, oven-burnt bricks, hollow cement or ash bricks, stone, stone blocks, jackboards (cement plastered reeds), iron, zinc or other metal sheets, timber, tiles, slate, corrugated iron, asbestos cement sheet, veneer, plywood, artificial wood of synthetic material, and polyvinyl chloride (PVC) material.

⁶ Temporary (katcha) material refers to grass, thatch, bamboo, plastic, polythene, mud, unburnt brick, or wood.

Table 1 Rural Housing Shortage, Working Group Method 1, 2012-17 in millions

Equation no.	Factors taken into account for assessing housing shortage	Computation	Shortage (in millions)
A	Number of households not having houses in 2012	No. of households – existing stock of houses (in numbers)	4.1
B	Number of temporary (katcha) houses in 2012	Existing stock of houses – number of permanent (pucca) and semi-permanent (semi-pucca) houses	20.2
C	Shortage due to congestion, 2012	6.5 per cent of number of households in 2012	11.3
D	Shortage due to obsolescence, 2012	4.3 per cent of number of households in 2012	7.5
T1	Total rural housing shortage, 2012	A+B+C+D	43.1
E	Additional housing shortage arising between 2012 and 2017	Increase in number of households between 2012 and 2017 – increase in stock of houses between 2012 and 2017	0.5
T2	Total rural housing shortage, 2017	T1+E	43.6

Source: Working Group on Rural Housing for the Twelfth Five Year Plan, MoRD (2011), p. 7.

Note: All numbers for 2012 were projections based on intercensal growth rates between the Censuses of 1991 and 2001.

A second method was based on estimates of the housing shortage at the end of the Eleventh Five-Year Plan, adding up the additional housing requirement due to shortage, obsolescence, and congestion, and subtracting from that number the number of houses constructed during the Eleventh Five Year Plan. By this method, the housing shortage was estimated to be 48.8 million in 2012 (MoRD 2011, p. 9).

The report of the Working Group thus concludes that, “at this stage, therefore, housing shortage under the XII Plan can safely be assumed to be of the order of about 40 million” (MoRD 2011, p. 9). Since there were 167.8 million rural households in 2011, the Working Group estimate suggested that approximately one-fourth of rural households lacked safe and sustainable houses.

CRITIQUE OF WORKING GROUP METHODOLOGY

In quantifying the shortage of rural housing, the Working Group was concerned solely with the structure of houses with respect to building material. There were problems with the assumptions of the Working Group even with respect to building material.

In the first place, the Working Group counted only temporary or katcha houses as being inadequate. There are two steps involved in classifying houses. First, the building material is classified as permanent or temporary, and, secondly, houses are classified as pucca, semi pucca or katcha. In terms of material, it is not obvious that all permanent material is safe. For example, asbestos, tin, and metal roof sheets, though classified as “permanent,” may not protect house-dwellers from weather-related health hazards. In terms of house types, the assumption that all pucca and semi-pucca structures are “safe and sustainable” is, of course, questionable, particularly with regard to semi-pucca structures in which only either walls or roof are made of permanent material. To illustrate, a semi-pucca structure could be a house with brick walls and a polythene roof, or a house with mud walls and a tin sheet for a roof. Such structures can neither be considered safe and sustainable nor anywhere near adequate by standards of workers’ housing set by the International Labour Organisation.

Even if we were to take only the issue of building material, the Census of 2011 data indicate that, out of 167.8 million rural households, 65.3 million households lived in houses without pucca roofs, 79 million in houses without pucca walls, and 106.3 million in houses without pucca floors (Table 2).

The Working Group definition of types of houses (as well as the definitions used by the Census of India and NSSO) ignore the material of which floors are made. As Census data do not permit a cross-tabulation of the material of which floors are made with data on the material used for roofs and walls, we report the proportion of households in our 15 survey villages that had houses whose walls, roofs, *and* floors were made of permanent material (Table 3). The proportion of households with houses that had either katcha roofs or floors or walls is shown in Appendix Table A2.

Village level data enable us to look at houses in which roofs, walls, and floors were all made of permanent material. Only one-half of all households lived in fully pucca structures. This proportion ranged from 0 in Badhar, a tribal village in Anuppur district, Madhya Pradesh, to 88 per cent in Rewasi (Sikar district, Rajasthan). Only 12 per cent of Adivasi households and 32 per cent of Dalit households lived in pucca structures; the corresponding proportion was 63 per cent for households belonging to Other Castes. Housing conditions among village Muslim households were generally worse than of other households.

If, for argument’s sake, we take the proportions from Table 3 (all villages combined) and apply them to the total rural population, we find that 22.4 million Scheduled Caste households, 17.7 million Scheduled Tribe households and 42.5 million Other Caste households lived in structures that were not fully pucca (that is, with walls, floors and roofs made of permanent material).

The all-India estimate derived from our village data shows that 82.6 million households did not live in structures that had roofs, walls, and floors made of

Table 2 Number and proportion of households that had houses with katcha roofs or katcha walls or katcha floors, India, rural, by social group, 2011 in millions and per cent

Social group	Katcha roof		Katcha walls		Katcha floor	
	Households (million)	Proportion of all households in the category (%)	Households (million)	Proportion of all households in the category (%)	Households (million)	Proportion of all households in the category (%)
Scheduled Caste	13.8	42	16.12	49	23.4	71
Scheduled Tribe	11.5	57	15.0	75	17.0	84
Others	39.9	35	47.8	42	65.9	57
All households	65.3	39	79.0	47	106.4	63

Source: Census of India 2011.

Table 3 Proportion of households with houses that had roofs, walls, and floors made of permanent material, by social group, survey villages in per cent

Village and State	Adivasi	Dalit	Muslim	Others	All
Ananthavaram (Andhra Pradesh)	11	19	28	60	38
Bukkacherla (Andhra Pradesh)	-	80	63	53	58
Kothapalle (Andhra Pradesh)	25	46	80	67	59
Warwat Khanderao (Maharashtra)	-	33	27	38	35
Nimshirgaon (Maharashtra)	-	33	29	65	52
Harevli (Uttar Pradesh)	-	11	0	24	16
Mahatwar (Uttar Pradesh)	-	9	-	7	8
25F Gulabewala (Rajasthan)	-	5	-	81	36
Rewasi (Rajasthan)	-	74	-	91	88
Dungariya (Rajasthan)	10	-	-	-	10
Gharsondi (Madhya Pradesh)	9	41	31	67	55
Badhar (Madhya Pradesh)	0	0	-	0	0
Alabujanahalli (Karnataka)	-	43	-	82	76
Siresandra (Karnataka)	-	62	-	82	75
Zhapur (Karnataka)	67	87	100	81	81
All villages combined	12	32	30	63	48

Source: Survey data.

permanent material (Table 4). This is four times the number of temporary houses in the Working Group’s calculation (Table 1, row B).

Turning to the other assumptions of the Working Group, congestion was defined as not having a separate room for each married couple in a household (congestion that arises on account of overcrowding of household members other than married couples was not counted). The Working Group did not use any simple or intuitive measure of congestion, such as the number of household members per room or the floor space per household member.

There were 7.2 million households at the Census of 2011 in the category of houses that had “no exclusive room.” UNHRP (2003) recommended not more than two persons per room.⁷ Among all rural households with three or more persons each, the number living in single-room houses was 53.4 million in 2011. Taken together, houses with no exclusive room or a single room and two or more inhabitants totalled 60.6 million. A more comprehensive method of estimating congestion would require us to match the number of rooms with the number of persons, so as to ensure that there were not

⁷ The definition of a “room” in the Census of India is a construction of length not less than 2 metres and breadth of at least 1.5 metres (or 3 sq metres). The International Labour Organisation (ILO) recommends that the floor area for a sleeping room be not less than 3.6 square metres per person. Data on the floor area of houses are not reported in the Census of India.

Table 4 Proportion of households whose houses were fully pucca (pucca roofs, pucca floors and pucca walls), all-India rural estimates, by social group, 2011 in millions

1	2	3	4
Social group	Percentage of households whose houses were not fully pucca (village data)	Total number of households, Census of 2011	Estimated number of households whose houses were not fully pucca
Scheduled Caste	68	32.9	22.4
Scheduled Tribe	88	20.1	17.7
Others	37	114.7	42.5
All			82.6

Source: Survey data and Census of India 2011.

Notes: Column 2 is from the village survey data in Table 3, Column 3 is from Census of India 2011, and Column 4 is the product of column 2 and column 3.

more than two persons per room.⁸ Census data indicate that, computing congestion on this basis, the living quarters of 95 million rural households were congested (Appendix Table A3). By contrast, the Working Group estimated the shortage caused by congestion to be only 11.3 million.⁹

The Working Group assumes that a structure becomes obsolescent after 80 years. Need it be said that eighty years is clearly too long a period for semi-pucca structures, and for many pucca structures as well, to last without sinking into obsolescence?

Lastly, the Working Group estimates were based on projections for 2012, which were based, in turn, on trends between the Censuses of 1991 and 2001. A method that is based on figures reported in the 2011 Census shows that using data from the Censuses of 1991 and 2001 further underestimates the shortage of rural housing. Although the growth of rural households was lower than projected in the intercensal years, thus reducing the initial gap between the number of households and housing stock to 1.7 million, the number of pucca and semi-pucca houses constructed during the decade was 34 million short of the projected figure.

Table 5 provides new orders of magnitude of the housing shortage in rural India in 2011 and can be interpreted as follows.

Even if we were to use the Working Group's method of defining shortage based on the first two components of Method 1 (rows A and B of Table 1), calculations based

⁸ N. S. S. Narayana calculated the housing shortage in rural and urban areas from data from the 19th round of the National Sample Survey (1964-65), checking the number of persons and rooms per household across all households. According to his calculations the housing shortage in India's rural areas in 1970 was 21.2 million standard units (Narayana, 1976).

⁹ The shortage that results from congestion cannot simply be added to the other factors, since some non-pucca and congested houses would then be counted twice.

Table 5 *Housing shortage based on revised methodology, India, rural, 2011* in millions

Serial no.	Revised method	Calculation	Shortage (millions)
A	Number of households without houses, 2011	Number of households – number of houses (167.8 – 166.1)	1.7
B	(i) Number of temporary houses, 2011	Number of houses – number of pucca and semi pucca houses ((166.2 – (73.1 + 42.2))	50.9
	(ii) Number of non-pucca houses, 2011	Number of houses – number of pucca houses* (166.2 – 73.1)	93.1
	(iii) Number of houses with katcha floor, 2011	Houses with katcha floors (mud/wood/bamboo)	106.4
	(iv) Number of houses not fully pucca#	Number of houses – estimated number of houses with pucca roofs, walls and floors	82.5
C	Congestion factor, 2011	Number of houses with more than 2 persons per room	95.0

*Notes:**As per the Census definition, that is, houses with both roofs and walls made of permanent material.
A fully pucca house is defined by us as one with roofs, walls and floors made of permanent material.
Estimate B (iv) is based on applying the figures from our village surveys to the all-India rural population. All other figures are based on Census 2011.

on the Census of India 2011 rather than projections from earlier Censuses (rows A and B(i) of Table 5), show that the housing shortage amounted to 52.5 million in 2011, substantially more than the Working Group projection of 24.4 million for 2012.

In terms of the quality of construction, taking only pucca houses as representing adequate construction (estimate B (ii)), the housing shortage was of the order of 93 million. If any house with a katcha floor were considered inadequate, the rural housing shortage was of the order of 106 million (estimate B (iii)). If only houses with pucca roofs, walls and floors were to be defined as pucca structures, the housing shortage was 83 million (this estimate is based on our village survey results). Lastly, if we were to take the ILO recommendation of not more than 2 persons per room as defining “congestion,” 95 million households lived in congested houses.

AN INTEGRATED VIEW

Neither the methodology of the Working Group nor the general policy approach of the Government of India addresses the issue of adequate, safe and sustainable housing.

The United Nations Committee on Economic Social and Cultural Rights identified the following as essential components of housing (United Nations 1991): legal security of tenure; availability of services, material, facilities and infrastructure; affordability; habitability; accessibility; location and cultural adequacy.

Recommendation No. 115 of 1961 of the International Labour Organisation on workers' housing (ILO 1961) gives clear guidelines on quality of housing. The list of requirements with respect to workers' housing includes:

- a. minimum space per person or per family as expressed in terms of floor area, cubic volume or size and number of rooms;
- b. a supply of safe water in the workers' dwelling in such ample quantities as to provide for all personal and household uses;
- c. adequate sewage and garbage disposal systems;
- d. appropriate protection against heat, cold, damp, noise, fire, and disease-carrying animals, and, in particular, insects;
- e. adequate sanitary and washing facilities, ventilation, cooking and storage facilities and natural and artificial lighting;
- f. a minimum degree of privacy both as between individual persons within the household, and for the members of the household against undue disturbance by external factors; and
- g. suitable separation of rooms devoted to living purposes from quarters for animals.

International covenants and resolutions are thus committed to an integrated view of housing. The Twenty Second Standing Committee of the Fourteenth Lok Sabha on Rural Housing, 2006, expressed a similar view:

The Committee is of the view that the aforesaid definition of housing considers a house only as a structure of four walls and a roof for a family. It ignores the fact that the residents of a house need various facilities like infrastructure facilities, water, sanitation, sewage disposal arrangements, transport, security, etc. (MoRD 2006, p. 8)

The Working Group, by contrast, takes a very restricted view of the constituent features of adequate housing, restricted, that is, to the material used in house construction.

We have attempted a simple computation from our village data. We listed a series of criteria, which, although they fell far short of the criteria listed by the United Nations or the International Labour Organisation, represented a basic measure of the quality of housing in rural India. The criteria we listed for a house were: (1) pucca roofs, walls and floors; (2) two rooms; (3) a source of water inside or immediately outside the house; (4) an electricity connection (authorised or unauthorised); and (5) a functioning latrine.¹⁰ We then calculated the head-count ratio of households that achieved these criteria from each of the 15 survey villages (for a list of the villages, see Appendix Table A1) and the head-count ratio from pooled data as well (Table 6).

¹⁰ In considering criterion (2) we excluded kitchens (in those houses that had separate kitchens at all, that is).

Table 6 Proportion of households living in houses with pucca roofs, walls and floors, two rooms, a water outlet within or just outside the premises, domestic electricity connection and a latrine, by social group, survey villages in per cent

Village and State	Adivasi	Dalit	Muslim	Others	All
Ananthavaram (Andhra Pradesh)	0	8	12	44	25
Bukkacherla (Andhra Pradesh)	–	0	0	2	2
Kothapalle (Andhra Pradesh)	0	9	0	14	12
Warwat Khanderao (Maharashtra)	–	0	2	3	3
Nimshirgaon (Maharashtra)	–	11	17	39	28
Harevli (Uttar Pradesh)	–	0	0	15	8
Mahatwar (Uttar Pradesh)	–	1	–	0	1
25F Gulabewala (Rajasthan)	–	3	–	76	32
Rewasi (Rajasthan)	–	14	–	23	21
Dungariya (Rajasthan)	0	–	0	0	0
Gharsondi (Madhya Pradesh)	0	12	0	18	14
Badhar (Madhya Pradesh)	0	0	–	0	0
Alabujanahalli (Karnataka)	–	3	–	32	28
Siresandra (Karnataka)	–	0	–	2	1
Zhapur (Karnataka)	0	0	0	0	0
All villages combined	0	6	4	22	15

Source: Survey data.

Note: not applicable

The numbers speak for themselves. The last row of the Table summarises the results for all villages. The first clear result is that the picture is one of large-scale and generalized deprivation. Among all households, 85 per cent fell short of achieving the specified criteria, which were, in any case, far below the standards of housing to which India is committed internationally. Secondly, exclusion was almost the rule among specific social groups: among Adivasi households in the surveys, none achieved the norm; among Dalit households in the surveys, 94 per cent did not achieve the norm; and among Muslim households, 96 per cent did not achieve the norm. Even among Other Caste households, 78 per cent did not achieve these criteria.

We then carried out an exploratory statistical exercise, projecting our findings on the all-India data. We took the head-count ratios for social groups from our survey data (as given in Table 6) and applied them to the Census of India data on rural households in India as a whole in order to obtain an order of magnitude of the shortage of rural housing (Table 7). The results shown in Table 7 are clearly not final, but indicative of the order of magnitude of the problem of housing shortages in rural India. Our results indicate that 140.5 million households did not meet the criteria for adequate housing that we set.

Table 7 shows that 140.5 million rural households, of a total of 167 million households, did not have a minimum standard of housing. The figure is corroborated by the

Table 7 Estimate of number of households that do not live in a house made of pucca roofs, walls and floors, two rooms, a water outlet within or just outside the premises, domestic electricity connection and a latrine, all India, rural, by social group in millions

1	2	3	4
Social group	Proportion of households that did not achieve the criteria specified in the table title above (%)	Total number of rural households, Census of India 2011	Estimated number of rural households that did not achieve the criteria specified in the table title above
Scheduled Caste	94	32.9	30.9
Scheduled Tribe	100	20.1	20.1
Others	78	114.7	89.5
All			140.5

Source: Survey data and Census of India 2011.

Census finding that 143 million households lived in houses without water within the premises, a latrine, and electricity. Only 2.9 million Dalit households out of a total of 32.9 million, and 0.8 million Adivasi households out of a total of 20.1 million households lived in houses with all three amenities (Census of India 2011). Even though these numbers are indicative, they are more than three times the official Working Group estimate of the shortage of rural housing (which was about 43 million units).

SUMMARY AND CONCLUSIONS

India is a party to several international conventions, agreements, and recommendations that commit the signatories to “a full and progressive realisation of the right to adequate housing.” These conventions and other documents together provide what may be called an integrated view of the component parts of adequate housing. The first UN Special Rapporteur on adequate housing, for example, wrote that “the human right to adequate housing is the right of every woman, man, youth and child to gain and sustain a safe and secure home and community in which to live in peace and dignity.” (United Nations 2006b, p. 5)

The estimates of the demand for housing in rural India made by the Working Group on Rural Housing for the Twelfth Five-Year Plan appointed by the Planning Commission measured housing shortages in rural India primarily in terms of the material of which roofs and walls were made. The Working Group estimated that the shortage of housing in rural India was of about 43 million housing units.

Data from the Census of India 2011 show a much greater shortage of housing than estimated by the Working Group on Rural Housing of the Twelfth Five-Year Plan. These data show that the shortage on account of not having a house or having a temporary (katcha) house was almost 52 million. Further, even though it defined the

quality of housing in terms only of building material, the Working Group disregarded the material of which floors were made when making its computations.

Using village-level data from 15 villages, we estimated the proportion of households that lived in houses that had pucca roofs, walls and floors; two rooms; a source of water inside or immediately outside the dwelling; an electricity connection; and a functioning latrine. Although these criteria still fall well short of the requirements of international norms on housing to which India has agreed, the results indicated that about 85 per cent of houses did not achieve these norms. In our village data, 94 per cent of the houses in which Dalit households lived, 96 per cent of the houses in which Muslim households lived and 100 per cent of the houses in which Adivasi households lived failed to meet the specified criteria.

In order to obtain orders of magnitude with respect to the housing shortage in rural India, we projected the results from our data on to the Census data on rural households. When the proportions that emerge from our villages were applied to Census of India 2011 data, the results indicated that some 140 million households did not meet the relevant criteria. Other data from the Census of India 2011 tend to corroborate these results, which represent a magnitude of about three times the shortage computed by the Working Group of the Planning Commission.

The Government's flagship housing programme for rural areas, the Indira Awaas Yojana, has a target of only 12 million new houses to be constructed from 2009-10 to 2014-15. Of these, according to official data, 7 million units were constructed from 2009-10 to 2010-11. Even if the Government were actually to achieve its annual target of around 3 million new houses, the housing shortage in rural India would persist for a very long time indeed.

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APPENDIX

Appendix Table A1 Location and description of the survey villages

Village	Block, District, State	Agro-ecological zone	Survey year	Total Households	Dalit households	Adivasi households	Other households
Ananthavaram	Kollur, Guntur, Andhra Pradesh	Krishna-Godavari zone	2006	665	283	44	338
Bukkacherla	Raptadu, Anantapur, Andhra Pradesh	Scarce rainfall zone of Rayalaseema	2006	289	58	-	231
Kothapalle	Thimmapur, Karimnagar, Andhra Pradesh	North Telangana zone	2006	371	118	11	242
Harevli	Najibabad, Bijnor, Uttar Pradesh	Bhabar and Tarai zone	2006	110	40	-	70
Mahatwar	Rasra, Ballia, Uttar Pradesh	Eastern Plain zone	2006	159	95	-	64
Warwat	Sangrampur, Buldhana, Maharashtra	Western Maharashtra	2007	250	25	-	225
Khanderao	Shirol, Kolhapur, Maharashtra	Plain zone	2007	137	48	-	89
Nimshirgaon	Karanpur, Sriganaganagar, Rajasthan	Trans-Gangetic Plains	2007	204	122	-	82
25F Gulabewala	Sikar, Sikar, Rajasthan	Central Plateau and Hills zone	2010	219	43	-	176

(Continued on next page)

Appendix Table A1 (Continued) Location and description of the survey villages

Village	Block, District, State	Agro-ecological zone	Survey year	Total Households	Dalit households	Adivasi households	Other households
Dungariya	Kotra, Udaipur, Rajasthan	Central Plateau and Hills zone	2007	110	-	107	3
Gharsondi	Bhitarwar, Gwalior, Madhya Pradesh	Hot semi-arid eco-region with alluvium-derived soils	2008	263	27	33	203
Badhar	Anuppur, Madhya Pradesh	Central Plateau and Hills zone	2008	116	2	88	26
Alabujanahalli	Maddur, Mandya, Karnataka	Southern Plateau and Hills	2009	246	36	-	210
Siresandra	Kolar, Karnataka	Southern Plateau and Hills zone	2009	77	26	-	51
Zhapur	Gulbarga, Gulbarga, Karnataka	Southern Plateau and Hills zone	2009	110	45	21	44

Source: Data archive of Project on Agrarian Relations in India.

Appendix Table A2 *Proportion of households with houses that have katcha roofs, katcha walls or katcha floor, survey villages in per cent*

Village (State)	Proportion of households with house structures with		
	Katcha roof	Katcha walls	Katcha floor
Ananthavaram (Andhra Pradesh)	58	31	48
Bukkacherla (Andhra Pradesh)	38	4	12
Kothapalle (Andhra Pradesh)	8	11	37
Warwat Khanderao (Maharashtra)	8	52	60
Nimshirgaon (Maharashtra)	9	18	40
Harevli (Uttar Pradesh)	41	20	82
Mahatwar (Uttar Pradesh)	20	24	86
25F Gulabewala (Rajasthan)	44	36	64
Rewasi (Rajasthan)	5	5	11
Dungariya (Rajasthan)	34	61	86
Gharsondi (Madhya Pradesh)	25	29	44
Badhar (Madhya Pradesh)	11	99	96
Alabujanahalli (Karnataka)	7	14	19
Siresandra (Karnataka)	3	10	19
Zhapur (Karnataka)	1	0	18
All villages combined	26	26	44

Source: Survey data.

Appendix Table A3 *Number of rooms and persons per household, all India rural, 2011 in millions*

No. of rooms	Persons/household								
	1	2	3	4	5	6 to 8	9 and above		
No exclusive room	5,21,964	9,40,823	10,42,863	15,66,606	12,60,541	15,35,392	3,43,401		
One room	37,61,788	89,68,247	1,02,33,108	1,50,33,962	1,21,57,756	1,40,17,030	19,83,559		
Two rooms	13,06,781	44,62,414	64,13,596	1,16,49,569	1,09,91,249	1,59,35,987	32,28,205		
Three rooms	3,56,133	12,35,151	20,65,468	40,69,016	41,29,847	70,94,772	23,58,247		
Four rooms	1,49,410	5,30,736	8,73,899	18,68,614	19,54,570	38,42,384	18,51,396		
Five rooms	45,419	1,57,158	2,54,316	5,32,625	6,29,905	13,33,671	8,89,252		
Six and more rooms	53,601	1,60,239	2,24,778	4,61,199	5,51,241	13,89,371	14,09,471		

Source: Census of India 2011