

## Appendix

Section I: Types of workforce directly and indirectly engaged in improving human health identified in the NSSO survey

| Classification of workforce         | NCO code 2004           | NIC code 2008       | Types of workers identified  |
|-------------------------------------|-------------------------|---------------------|--|
| Health workers in health sector     | 222, 223, 322, 323, 324 | 86100 to 86909      | Physician, AYUSH, Dentist, Nurse and midwives, health associates, physiotherapist, traditional medical practitioners |
| Health workers in non-health sector | 222, 223, 322, 323, 324 | All other NIC codes | Health professionals (including physician, AYUSH and Dentist) , Nurse and midwives, health associates,               |
| Non-health workers in health sector | All other NCO codes     | 86100 to 86909      | Other support staff such as Managers, Engineers, Clerks, cashiers, personal care, garbage collectors, drivers etc.   |

## Section II. Methods of projection for health workers

To project the size of HRH at January 1, 2016, first we projected total population using the following equation (1)

$$popl_{ijk} 2016 = popl_{ijk} 2011 * (1 + r_{ijk} \div 100)^{4.75} \dots\dots\dots (1)$$

Where;  $popl_{ijk} 2016$  is projected population as of January 1, 2016;  $popl_{ijk} 2011$  is population on March, 1 2011; Number of years between March 1, 2011 and January 1, 2016 is represented by 4,75; and subscript  $ijk$  represents group of population of gender  $i$  (male or female) living in area  $j$  (rural or urban) in state  $k$ .

$r_{ijk}$  is cumulative annual growth rates (%) of population  $ijk$  between 2001 and 2011 estimated using the formulae:  $r_{ijk} = \sqrt[10]{((popl_{ijk} 2011 \div popl_{ijk} 2001) - 1) * 100} \dots\dots\dots (2)$

