



सत्यमेव जयते

Government of India

Ministry of Agriculture

Department of Animal Husbandry, Dairying & Fisheries

Breed Survey

Instruction Manual

Contents

Chapter - I	3
Introduction.....	3
Chapter-II.....	5
General Information	5
Chapter-III.....	7
Important concepts and definitions	7
Chapter –IV	11
Instructions to Field Staff for recording information in Schedule 1: House list of households, enterprises and institutions.....	11
Chapter-V.....	14
Instructions to Field Staff for recording information in Schedule 2: Village/Ward Profile	14
Chapter VI.....	16
SCHEDULE- 3 -HOUSEHOLD SCHEDULE	16
Chapter-VII.....	25
Instructions to field Staff for recording information on age, sex and utility of various breeds in Schedule 3.....	25
Appendix-II-Schedules for Breed Survey- Schedule-1 to 3	
Appendix-III- Migratory pastoral groups	
Appendix-IV (A) - Breed Name and Breed Codes as approved by NBAGR	
Appendix-IV (B)- NBAGR Manual for Identification of Breeds	

Chapter - I

Introduction

1. Background

1.1 Livestock rearing is one of the most important economic activities in the rural areas of the country contributing significantly to the national economy. It provides supplementary income to most of the family dependent on agriculture and for many landless families, the income generated through the livestock rearing activities has been the mainstay. It has been found that the families with holding size less than 4 hectare own around 88% of the livestock. Within this, about 37% of the livestock is owned by the families with land holding size less than a hectare. Apart from providing a subsidiary income to the families, rearing of livestock such as cattle, buffaloes, sheep, goats, pigs, poultry etc. is a source of protein in the form of milk, eggs and meat. It has been found that in the time of exigencies like drought and other natural calamities, it is the livestock, which comes to the rescue of the vast sections of rural population. Besides, animal husbandry has got immense potential of employment generation through direct engagement as well as ancillary activities.

1.2 Government is continuously trying for bringing further improvements and developing this Sector in the country as an industry. Various schemes aimed at increasing the availability of genetically improved quality of livestock and poultry, control of diseases, assisting and encouraging the farmers to go for genetically upgraded animals and assured protection against loss of such animals through an established mechanism have been initiated.

1.3 For proper planning and formulation of any programme meant for bringing further improvement in this sector and its effective implementation and monitoring their impact, data are required at every possible administrative and geographic level. The Livestock Census conducted quinquennially is the main source of such data in the country. The livestock census in the country started in the year 1919-1920. Since then it has been conducted once at every 5 years. The 19th census was conducted in 2012 with

reference date 15th October. The Breed Survey will be carried out on 15% Village/Wards at sub-district level in rural areas and recognized pockets of urban blocks in urban areas. This Survey will be conducted with reference date 31st July, 2013. However, the survey will commence from 1st June 2013 and to be completed by 31st July, 2013. The Schedules to be canvassed in this survey is given at **Appendix-II**. A brief description of schedules is given below:

1.3.1 Schedule-1. House list schedule: The Schedule-1 will be canvassed for recording the list of households, Household Enterprises and Non household Enterprises existing in the area under enumeration. The Schedule-1 as canvassed in 19th Livestock Census will be used to revisit the sample Village/Panchayat/Wards/ enumeration blocks for recording the list of households, Household Enterprises and Non household Enterprises and changes, if any. This list will be helpful to the Enumerator in canvassing the Schedule-3 for detailed enquiry on breeds of livestock species in every household having livestock.

1.3.2 Schedule-2. Village Profile: This schedule provides general profile of the Village/Ward and contains the information on Number of Breed-wise Stray cattle and Dog. This information will be collected mainly from the Panchayat Revenue Officials/Gram Pradhan. In addition to it, Schedule-2 will consist of information from Schedule-1 & Schedule-3.

1.3.3 Schedule-3. Household Schedule: This is the main schedule for collecting data on Breeds of various livestock which has to be canvassed in every household having livestock. Each row of the schedule will contain the information pertaining to a household. Schedule has been divided into two parts namely Block A (Household/Household enterprises) and Block B (Non Household enterprises /Institution) consisting of 12 blocks each. Information on number livestock, Breed-wise in respect of various species will be recorded by their age, sex, utility etc. separately for (i) households and household enterprises (ii) non-household enterprises and institutions.

Chapter-II

General Information

2.1 The data collected through breed survey will be utilized for identifying total no. of animals in a particular breed by their age, sex and utility so as to enable the Department to formulate various schemes/programmes for various breeds. The survey is planned to be conducted in 15% villages in each sub-district of a district for which enumerators and supervisors will be deployed at field level. The enumeration has to be done by technical staff including veterinary practioners/Para veterinarians /veterinary graduates/Interns either in job or retired.The duty of the Breed Survey Enumerator/Supervisor is of great national importance. They play most crucial role in maintaining the timelines in collection as well as quality of data. Enumerators/Supervisors have to fulfil their responsibilities with a sense of pride and devotion.

2.2 The Enumerators are required to organize the work in the following manner:

Step1: Enumerator/Supervisor should read the instruction manual given at the time of training thoroughly and fully understand them.

Step 2: Enumerator/Supervisor should be fully well conversant with the local conditions and the work required. They must develop a cordial relation with the inhabitants of the area by meeting the imminent personalities such as Gram Pradhan, Panchayat Members, Government Officials, Religious /Community Leaders etc. The Enumerators/Supervisors should take them in confidence while carrying out the survey work. This will help them in removing misapprehensions of the people and ease out hostility, if any, in their work of enumeration.

2.3 The enumerators should keep the following in mind while doing the survey work:

- The information collected under this scheme should be used only for statistical purposes.
- The enumerators should keep all information collected under this scheme to themselves and shall not be revealed to anyone either for official or non-official purposes.
- Violation of confidentiality of the individual information is liable to disciplinary action.
- The enumerators should be vigilant and should collect information from every household.
- The enumerators should Keep all records properly and arrange them in sequence of house listing. The Schedules should be kept safe, wrinkle free.

2.4 After the enumeration work of the allotted village/wards is over, the Enumerator has to write period of enumeration, her/his name and put her/his signature at the space provided in the bottom of the Schedule-1 and Schedule-2. If the Supervisor visits at any time during enumeration and supervises the work of enumeration, she/he should also write her/his name and put her/his signature along with the date of visit.

Chapter-III

Important concepts and definitions

3.1 Geographical coverage: For Breed Survey, the enumeration will be done in 15% Village/Wards of every sub-district in rural areas and pre-determined areas having livestock in urban cities/ wards. Various species of animals and their Breeds (Cattle, Buffalo, Mithun, Yak, Sheep, Goat, Pig, Horse, Pony, Mule, Donkey Camel, Pig, and Rabbit) possessed by the households, households enterprises and institutions will be counted at their site.

3.2 Methodology: The survey will be conducted throughout the country through stratified random sampling technique by selecting 15% Village/Wards under the sub-districts of a district in the States/UTs. The migratory pastoral groups will be surveyed at their original place of resident and locating them at the place of rearing the livestock. States/UTs may refer **Appendix-III** for identification of migratory pastoral group for respective States/UTs. Similarly in urban town, the survey will be conducted in the pre-determined areas in the selected pockets where major livestock are available.

The definition of different entities and terms used in the survey are discussed below.

3.3 Building: A building is generally a single structure on the ground. Sometimes it is made up of more than one component unit which are used or likely to be used as dwellings (residence) or establishments such as shops, business houses, offices, factories, work sheds, schools, places of entertainment, places of worship, godowns, stores, etc. It is also possible that buildings which have composite units may be used for a combination of purposes such as shop-cum-residence, workshop-cum-residence, office-cum-residence etc.

3.4 House: A house is a building or part of a building having a specific main entrance from the road or common courtyard or staircase, etc. used or recognized as a separate unit. It may be occupied or vacant. It may be used for a residential or non-residential purpose or both. If a building has a number of flats or blocks which are independent of one another having separate entrances of their own from the road or a main gate, they will be considered as separate house.

3.5 Household: A group of persons normally living together and taking food from a common kitchen will constitute a household. Head of household will be that member of the household who is accepted generally as the head of the household by the members of the family. He/she may or may not be the major earning member. It should be left to the members of a household to decide upon whom they consider to be the head of the household.

3.6 Rural and Urban Areas:

An urban area, according to the Census definition, consists of:

- 1) Statutory towns: All places with a municipality, corporation, Cantonment Board or notified town area committee, etc. so declared by state law. And
- 2) Census towns: Places which satisfy following criteria are declared as town:-
 - a) A minimum population of 5000;
 - b) At least 75 percent of male working population engaged in **non-agricultural** pursuits; and
 - c) A density of population of at least 400 persons per sq km.

In addition to it, some areas falling in the vicinity of city or town are also considered as urban area if they are treated as the out growths (OGs) of the main urban unit.

Rural Areas: All areas not covered under statutory towns and Census towns will be considered as Rural Areas for the survey.

3.7 Village/Ward: In the rural areas the smallest area of habitation, viz., the Village/Ward generally follows the limits of a revenue Village/Ward that is recognized by the normal district administration. The revenue Village/Ward need not necessarily be a single agglomeration of the habitations. But the revenue Village/Ward has a definite surveyed boundary and each Village/Ward is a separate administrative unit with separate Village/Ward accounts. It may have one or more hamlets. The entire revenue Village/Ward is one unit. There may be un-surveyed Village/Wards within

forests etc., where the locally recognized boundaries of each habitation area are followed within the larger unit of say the forest range officer's jurisdiction.

3.8 Enterprise: An enterprise is an undertaking which is engaged in production and or distribution of some goods and or services meant mainly for the purpose of sale.

3.9 Household enterprise: A household enterprises is one which is run by one or more members of a household or run jointly by two or more households on partnership basis irrespective of whether the enterprise is located in the premises of the household or not.

3.10 Non-household enterprise: A non-household enterprises is one which is institutional i.e. owned and run by the public sector (Central or State Government, local bodies, government undertakings, etc.), private corporate sector (include public and private limited companies registered as joint stock companies under the Companies Act 1956), Co-operative societies, other type of societies, institutions, associations, trusts, etc. .

3.11 Institution: For the purpose breed survey, Temple, Mosque, Church and Gurudwara, etc will be covered under Institution.

3.12 Indigenous Animals: Animals which belongs to descript/ non-descript breeds of indigenous origin.

3.13 Exotic Animals: Animals which are developed in other countries are described as exotic animals. *The most important exotic dairy cattle breeds in India are Jersey and Holstein Friesian (HF).*

3.14 Cross-bred Animals: Animals which are produced by crossing indigenous animals with exotic breeds or indigenous animals which have exotic inheritance are described as crossbred animals.

3.15 Graded Breeds: Indigenous breeds having more than 50% phenotypic characteristics for cattle, buffalo, sheep and Goat to be characterized as graded breed of the same livestock.

3.16 Animals in milk: Animals in milk production are described as animals in milk.

3.17 Dry Animals: Animals which have calved at least once but at present not in production, are described as dry animals. Animals that cannot be calved in future are not covered under this category.

3.17 Non-descript breeds: The Non-descript breeds are those Indigenous breeds which cannot be identified as *or* do not have more than 50% similarities of any recognized breed.

Chapter –IV

Instructions to Field Staff for recording information in Schedule 1: House list of households, enterprises and institutions

4.0 Schedule-1. List of households/enterprises/institutions

The Schedule-1 will be canvassed for recording the list of households, Household Enterprises and Non household Enterprises existing in each selected villages/wards. The Schedule-1 as canvassed in 19th Livestock Census can be used as reference while recording the list of households, Household Enterprises and Non household Enterprises and changes if any to be recorded in this schedule. The Identification Particulars should be crosschecked while canvassing the schedule.

The enumerators are required to prepare a complete list of the households in Schedule-1 in respect of every Village/Ward with the location of their residence for canvassing the Schedules-3 in respect to every Household. This schedule will also be filled up by visiting every building and the household residing therein. Filling up of this schedule will ensure coverage of all households residing in the Village/Ward.

4.1 The various columns of the Schedule-1 and procedures for filling up them are described below:

4.1.0 Part I: *Item No. 1 to 5: Identification Particulars:* Item no 1 - 5 in this Schedule to be filled up according to the sample list provided.

4.1.1 Part II: List of households/enterprises/institutions

Box 4.1

Information pertaining to each household, household enterprises, non-household enterprises and institution will be recorded in a separate row

Schedule -1 of 19th live stock census should be carried and used for cross reference

Particulars of **list of households/enterprises/institutions** i.e. item no 1-5 to be recorded in respect of each selected village by inquiry and the particulars are to be verified by cross-checking with Schedule -1 of 19th live stock census during canvassing the

schedule and changes if any to be recorded therein. A brief description of various columns under this part is follows:

4.1.2 Column (1): Serial number: Running Serial Number may be given in this column

4.1.3 Column (2): The name of the hamlet, street, mohalla and date of listing may be written in column (2) at the top before listing of houses starts. This will help in checking completeness. The various columns of the Part-II of Schedule-1 and procedures for filling up them are described below:

House number: All houses including vacant ones shall be listed by giving a house number. The 2011 Population Census house number or the number given by the local panchayat, municipality or other local bodies, may be used, if available. However, for the houses without such numbers, a uniform procedure has to be adopted for numbering them. They will be given a separate running serial number starting from 1 within brackets. Whenever house numbers are available, even if not for all the houses, the actual house numbers shall be recorded without any brackets.

4.1.4 Column (3): Serial Number of Household: The household(s) residing in the house listed in column (2) will be numbered in column (3). All households will be given a running serial number in this column. Against vacant and non-residential houses, no serial number will be provided and (-) will be recorded in column (3).

Box 4.2

Households in a listing schedule will be given continuous serial no. If the listing is not completed in one listing schedule, the listing can be continued in a fresh listing schedule with continuous serial no.

Enter one name in one row corresponding to each household.

The head of the household is ascertained on the information furnished by the respondent.

4.1.5 Column (4): Name of Head of Household/ Name of Enterprises/ Institutions: In case of a residential house listed in column (2) name of head of household will be recorded in this column for each household residing in the house. Head of household will be that member of the household who is accepted generally as the head of the household by the members of the family. The name of the Head of each household is to be recorded in this column. In the case of a non-residential house listed in column (2),

it will be mentioned in column (4) whether it is a Dairy Farm, Sheep Farm, Goat Farm, Pig Farm, Goshala, Poultry Farm, Poultry Hatchery, Meat/butcher shop, Slaughter house, Meat processing plant, Agriculture University, Veterinary College, temple, Dharamshala, Office building, Non-Agricultural Enterprise(NAE), panchayat ghar, etc.

Box 4.3

For such households who keep their all livestock at their enterprises, animals will be counted while listing their enterprises. In such cases the household will not be given any Serial Number in the column (6) because animals are not kept in household.

If Poojari of a temple who is living in the temple is owner of a cow, that cow will be counted in his household and not under the 'Institution'. If a cow is owned by the temple then it will be counted in the name of that temple (institution).

4.1.6 Column (5): If a household/ household enterprise/ Non-household enterprise/ Institutions have any type of livestock put tick mark (✓)

4.1.7 Column (6): Write Serial No. of household/ household enterprise has any type of livestock against tick mark (✓) in Column (5) in running format.

4.1.8 Column (7): Write Serial No. of Non- Household enterprises/Institutions have any type of livestock against tick mark (✓) in Column (5) in running format.

Chapter-V

Instructions to Field Staff for recording information in Schedule 2: Village/Ward Profile

5.0 Schedule-2. Village/Ward Profile

This Schedule has been organized in 4 parts. Part-I gives the detailed identification particulars of the village/ward and the number of households, Part-II gives information on the availability of breed of stray cattle and dogs, Part III gives total number of households/ household enterprises/ non-household enterprises/ institutions having exotic/crossbreed/Indigenous/non-descript livestock of various species derived from Schedule 3 and Part IV gives Block wise (Block- 1A/B to Block- 12A/B), breed wise and species wise totals derived from Schedule 3.

5.1 Part -I. Village/Ward Identification Particulars:

Item No. 1 to 4: In the space provided against each items, name and corresponding codes of the state, districts, tehsil/block/police station and Village/Ward will be written. The codes as developed by the Office of the Registrar General India for various administrative areas shall be used for this purpose.

5.2 Part -2. Information on stray cattle & stray Dogs

Item 1 to 2: Information on approximate number of breed wise stray cattle and dogs in the Village/Ward, which will be collected from Sarpanch/other panchayat member/ patwari/teacher/others knowledgeable person, will be recorded here.

5.3 Part-3 Number of households/ household enterprises and Non-Household enterprises/ institution, having species wise livestock: (Information to be recorded from of Schedule 3)

Item 3.1 to 3.6: The Number of households/ household enterprises and Non-Household enterprises/ institution, having species wise livestock, will be recorded here from Schedule 3 corresponding to each breed by counting the total number of filled in rows

as recorded under the Row 'Subtotal'. If more than one page is used for recording such information, sum total of all pages' subtotals to be made and recorded accordingly.

5.4 Part- 4 Number of livestock: Village /Ward totals (Information to be recorded from Schedule 3): Under this part the information are to be recorded from Schedule 3 for household/ household enterprises (Block A) and non-households enterprises/ institutions (Block B). The total no of breeds in each species age, sex, utility wise are recorded from Scehdule-3. This part is divided into 60 Items according to the breeds identified under various species.

The *Items 1 to 60* is to be filled up from Schedule 3 corresponding to each breed by counting the totals under each column of the respective breed as calculated and recorded in the sub-total of the Page. If more than one page is used for recording such information, sum total of all pages' subtotal to be made and recorded accordingly. For example in the case of Exotic Cattle (Jersey) under Item 1, the totals of Columns (3) to (30) recorded at the bottom of the page are to be filled up in the respective columns in Block 1A of Schedule 2 (Exotic Cattle).

Box 5.1

At most care should be taken while recording each column of Items 1 to 60 from Scehdule-3

The breed name and codes should be recorded as per the list provided under the Instruction Manual(Annexure)

If States are having more identified breeds under Indigenous category the Items under this Part may be extended suitably

Chapter VI

SCHEDULE- 3 -HOUSEHOLD SCHEDULE

6.1 In schedule 3, the detailed information on each breed of various species is collected and recorded. This schedule is divided into 24 blocks into two categories. Block 1A, 2A, 3A, 4A, 5A, 6A, 7A, 8A, 9A, 10A, 11A, 12A belong to Household/ Household enterprises and Block 1B, 2B, 3B, 4B, 5B, 6B, 7B, 8B, 9B, 10B, 11B, 12B belong to Non-household enterprises/Institutions. This schedule will be filled up for every such household which are residing in the Village/Ward under enumeration and are possessing any Livestock i.e Cattle, Buffalo, Yak, Mithun, Sheep, Goat, Horse, Pony, Mule, Donkey, Camel, Pig, Rabbit . **Each row of this schedule will contain the detailed information of a particular household.** For canvassing the next households, next row will be used and this process will continue until every household of the Village/Ward are enumerated. Considering number of households in a Village/Ward having Livestock Species, additional sheets of particular species to be added in the Schedule.

6.2 There are numbers of breeds of different species of livestock found in the country. Information on a particular type of breed of a species possessed by the household will be recorded in different columns fixed for this purpose. The information of another breed of the same species will be recorded in separate columns fixed for particular Breeds. A household may not have livestock of every species and breeds. Start listing of information on various species and their breeds possessed by the household in the order of cattle, buffalo, mithun, yak, sheep, goat, horse, pony, mule, donkey, camel, pig, and rabbit. After completion of recording of information on every breed of a particular species possessed by the household go for the next species. It may be possible that certain species of livestock may not be available in a household. In such case, go for the next species in the list possessed by the household. The Detailed procedures for filling up various parts of this schedule are follows: *(Please also read with Chapter VII of the Instruction manual)*

6.3 Block 1A & 1B: (Cattle Species code-01): Exotic Cattle

Jersey (Breed Code 010): The columns 1 to 2 in this block is to be recorded from Schedule 1 and the information corresponding to columns 3 to 16 for number of Jersey with their age, sex and uses are to be collected and recorded.

Crossbred Jersey (Breed Code: 011): The columns 1 to 2 in this block is to be recorded from Schedule 1 and the information corresponding to columns 17 to 30 for number of Crossbred Jersey with their age, sex and uses are to be collected and recorded.

Holstein Friesian (Breed Code: 020): The columns 1 to 2 in this block is to be recorded from Schedule 1 and the information corresponding to columns 31 to 44 for number of Holstein Friesian with their age, sex and uses are to be collected and recorded.

Crossbred Holstein Friesian (Breed Code: 021): The columns 1 to 2 in this block is to be recorded from Schedule 1 and the information corresponding to columns 45 to 58 for number of Crossbred Holstein Friesian with their age, sex and uses are to be collected and recorded.

6.4 Block 1A & 1B: (Cattle Species code-01): Indigenous Cattle (original breed & Graded)

The columns 1 to 2 in this block are to be recorded from Schedule 1. The information corresponding to columns 59 to 142 for number of original breed & Graded with their age, sex and uses are to be collected and recorded for each breed specifying breed name and breed code as per the list enclosed in **Appendix IV (A)**.

6.5 Block 1A & 1B: (Cattle Species code-01): Non-Descript (breed code 99)

The columns 1 to 2 in this block are to be recorded from Schedule 1. The Non-descript breeds are those indigenous breeds having less than 50% phenotypic characteristics of a particular breed which cannot be recognized as any identified breeds. The information corresponding to columns 143 to 156 for number of non-descript cattle with their age, sex and uses are to be collected and recorded.

Grand Total of cattle: The column number 157 refers to Grand Total of cattle in Block 1A and 1B of Schedule 3. It is the sum of column numbers 16, 30, 44, 58, 72, 86, 100, 114, 128, 142 and 156.

6.6. Block 2A & 2B: (Species code-02): Buffaloes

Buffaloes: The Breed and Graded Breed available in the States and registered under NBAGR are to be recorded specifying breed name and their respective Breed Code. The columns 1 to 2 in this block are to be recorded from Schedule 1. The information corresponding to columns 3 to 86 for number of original breed & Graded with their age, sex and uses are to be collected and recorded for each breed and its graded breed along with breed code as per the list enclosed in **Appendix IV (A)**.

Non-descript Buffaloes: (Breed code-99): The Non-descript buffaloes are those indigenous breeds having less than 50% phenotypic characteristics of a particular breed which cannot be recognized as any identified breeds. All Buffaloes not specified by any Breed Name or Breed Code in the State/UTs to be recorded. The columns 1 to 2 in this block are to be recorded from Schedule 1. The information corresponding to columns 87 to 100 for number of non-descript buffaloes with their age, sex and uses are to be collected and recorded.

Grand Total of Buffaloes: The column number 101 refers to Grand Total of Buffaloes in Block 2A or 2B of Schedule 3. It is the sum of column numbers 16, 30, 44, 58, 72, 86 and 100.

6.7 Block 3A & 3B: (Species code-03): Mithuns

Mithuns: The Breed name and Breed Code for breeds available in the States and registered under NBAGR are to be specified and recorded. The columns 1 to 2 in this block are to be recorded from Schedule 1. The information corresponding to columns 3 to 16 for number of Mithuns with their age, sex and uses are to be collected and recorded for each breed code as per the list enclosed in **Appendix IV (A)**.

Non-Descript Mithuns: (Breed code-99): All Mithuns not specified by any Breed Name or Breed Code in the State/UTs to be recorded. The columns 1 to 2 in this block are to be recorded from Schedule 1. The information corresponding to columns 17 to 23 for

number of non-descript Mithuns with their age and sex are to be collected and recorded.

Grand Total of Mithuns: The column number 24 refers to Grand Total of Mithuns in Block 1A or 1B of Schedule 3. It is the sum of column numbers 9, 16 and 23.

6.8 Block 4A & 4B: (Species code-04): Yaks

Yaks: The Breed name and Breed Code for breeds available in the States and registered under NBAGR are to be specified and recorded. The columns 1 to 2 in this block are to be recorded from Schedule 1. The information corresponding to columns 3 to 16 for number of Yaks with their age and sex are to be collected and recorded specifying breed name and their respective Breed Code for each breeds as per the list enclosed in **Appendix IV(A)**.

Non-descript Yaks (Breed code-99): All Yaks not specified by any Breed Name or Breed Code in the State/UTs to be recorded. The columns 1 to 2 in this block are to be recorded from Schedule 1. The information corresponding to columns 17 to 23 for number of non-descript Yaks with their age and sex are to be collected and recorded.

Grand Total of Yaks: The column number 24 refers to Grand Total of Yaks in Block 4A or 4B of Schedule 3. It is the sum of column numbers 9, 16 and 23.

Number of Bovine (Cattle+Buffalo+Mithun+Yaks): The column number 25 of Block 4A or Block 4B refers to Grand Total of Cattle, Buffaloes, Mithuns and Yaks of Schedule 3.

6.9 Block 5A & 5B: (Species code-05): Sheep

Exotic Breed of Sheep: Exotic Breed available in the State & registered under NBAGR is to be collected. Its Breed name and Breed Code are to be specified and recorded. The columns 1 to 2 in this block are to be recorded from Schedule 1. The information corresponding to columns 3 to 23 for number of exotic sheep breed with their age and sex are to be collected and recorded for each exotic breed specifying breed names and their respective Breed Codes as per the list enclosed in **Appendix IV(A)**.

Exotic Crossbred Sheep: Exotic Crossbred Sheep available in the State & registered under NBAGR are to be recorded specifying its Breed name and Breed Code. The columns 1 to 2 in this block are to be recorded from Schedule 1. The information corresponding to columns 24 to 30 for number of Crossbred sheep breed with their age and sex are to be collected and recorded by specifying breed name and their respective Breed Codes as per the list enclosed in Appendix.

Indigenous Sheep: Indigenous Sheep available in the State & registered under NBAGR are to be recorded specifying its Breed name and Breed Code. The columns 1 to 2 in this block are to be recorded from Schedule 1. The information corresponding to columns 31 to 72 for number of original breed & Graded with their age, sex and uses are to be collected and recorded for each breed and its graded breed along with breed code as per the list enclosed in **Appendix IV (A)**.

Non-descript Sheep (Breed code-99): All other Sheep not specified by any Breed Name or Breed Code in the State/UTs to be recorded. The columns 1 to 2 in this block are to be recorded from Schedule 1. The information corresponding to columns 73 to 79 for number of non-descript sheep with their age and sex are to be collected and recorded.

Grand Total of Sheep: The column number 80 refers to Grand Total of Sheep in Block 5A or 5B of Schedule 3. It is the sum of column numbers 9, 16, 23, 30, 37, 44, 51, 58, 65, 72 and 79.

6.10 Block 6A & 6B: (Species code-06): Goats

Goat: Goat available in the State & registered under NBAGR is to be recorded specifying its Breed name and Breed Code. The columns 1 to 2 in this block are to be recorded from Schedule 1. The information corresponding to columns 3 to 74 for number of original breed & Graded with their age, sex and uses are to be collected and recorded for each breed and its graded breed along with breed code as per the list enclosed in **Appendix IV (A)**.

Non-descript Goats (Breed code-99): All Goats not specified by any Breed Name or Breed Code in the State/UTs to be recorded. The columns 1 to 2 in this block are to be recorded from Schedule 1. The information corresponding to columns 75 to 83 for

number of non-descript Goats with their age, sex and uses are to be collected and recorded.

Grand Total of Goats: The column number 84 refers to Grand Total of Goats in Block 6A or 6B of Schedule 3. It is the sum of column numbers 11, 20, 29, 38, 47, 50, 56, 65, 74 and 83.

6.11 Block 7A & 7B: (Species code-07): Horses:

Horses: Horses available in the State & registered under NBAGR are to be recorded specifying its Breed name and Breed Code. The columns 1 to 2 in this block are to be recorded from Schedule 1. The information corresponding to columns 3 to 18 for number of Horses breed with their age, sex and uses are to be collected and recorded specifying breed name and their respective Breed Codes for each breed as per the list enclosed in **Appendix IV(A)**.

Non-descript Horses (Breed code-99): All Horses not specified by any Breed Name or Breed Code in the State/UTs to be recorded. The columns 1 to 2 in this block are to be recorded from Schedule 1. The information corresponding to columns 19 to 26 for number of non-descript Horses with their age, sex and uses are to be collected and recorded.

Grand Total of Horses: The column number 27 refers to Grand Total of Horses in Block 7A or 7B of Schedule 3. It is the sum of column numbers 10, 18 and 26.

6.12 Block 8A & 8B: (Species code-08): Ponies & Mule: (Species code-09):

Ponies: State recognised Breed name and Breed Code to be specified and recorded. The columns 1 to 2 in this block are to be recorded from Schedule 1. The information corresponding to columns 3 to 18 for number of Ponies breed with their age, sex and uses are to be collected and recorded for each breed code as per the list enclosed in **Appendix IV(A)**.

Non-descript Ponies (Breed code-99): All Ponies not specified by any Breed Name or Breed Code in the State/UTs to be recorded. The columns 1 to 2 in this block are to be recorded from Schedule 1. The information corresponding to columns 19 to 26 for

number of non-descript Ponies with their age, sex and uses are to be collected and recorded.

Grand Total of Ponies: The column number 27 refers to Grand Total of Ponies in Block 8A or 8B of Schedule 3. It is the sum of column numbers 10, 18 and 26.

Mule: (Species code-09):

Number of Mules: The information corresponding to columns 28 to 30 for number of mules breed with their age is to be collected and recorded.

6.13 Block 9A & 9B: (Species code-10): Donkey:

Italian Donkey (breed code- 01): The columns 1 to 2 in this block are to be recorded from Schedule 1. The information corresponding to columns 3 to 9 for number of Italian Donkey with their age and sex are to be collected and recorded.

Indigenous Donkey (breed code- 02): The columns 1 to 2 in this block are to be recorded from Schedule 1. The information corresponding to columns 10 to 16 for number of Indigenous Donkey with their age and sex are to be collected and recorded.

Grand Total of Donkey: The column number 17 refers to Grand Total of **Donkey** in Block 9A or 9B of Schedule 3. It is the sum of column numbers 9 and 16.

6.14 Block 10A & 10B: (Species code-11): Camels:

Camels: Camels available in the State & registered under NBAGR are to be recorded specifying its Breed name and Breed Code. The columns 1 to 2 in this block are to be recorded from Schedule 1. The information corresponding to columns 3 to 23 for number of Camels breed with their age and sex are to be collected and recorded for each breed code as per the list enclosed in **Appendix IV(A)**.

Non-descript Camels (Breed code-99): All Camel not specified by any Breed Name or Breed Code in the State/UTs to be recorded. The columns 1 to 2 in this block are to be recorded from Schedule 1. The information corresponding to columns 24 to 30 for number of non-descript Camels with their age and sex are to be collected and recorded.

Grand Total of Camels: The column number 31 refers to Grand Total of Camel in Block 10A or 10B of Schedule 3. It is the sum of column numbers 9, 16, 23 and 30.

6.15 Block 11A & 11B: Species code-12: Pigs:

Exotic Pigs: Exotic Breed available in the State & registered under NBAGR is to be recorded specifying its Breed name and Breed Code. The columns 1 to 2 in this block are to be recorded from Schedule 1. The information corresponding to columns 3 to 30 for number of Exotic Pigs with their age and sex are to be collected and recorded for each exotic breed along specifying its breed name and breed code as per the list enclosed in **Appendix IV(A)**.

Exotic Crossbred Pigs: Exotic Crossbred Pigs available in the State & registered under NBAGR is to be recorded specifying its Breed name and Breed Code. The columns 1 to 2 in this block are to be recorded from Schedule 1. The information corresponding to columns 31 to 37 for number of Crossbred Pigs with their age, sex and uses are to be collected and recorded as per the list enclosed in **Appendix IV(A)**.

Indigenous Pigs: Indigenous Pigs available in the State & registered under NBAGR is to be recorded specifying its Breed name and Breed Code. The columns 1 to 2 in this block are to be recorded from Schedule 1. The information corresponding to columns 38 to 58 for number of indigenous pigs with their age, sex and uses are to be collected and recorded for each breed along with breed code as per the list enclosed in **Appendix IV (A)**.

Non-Descript Pig (Breed code-99): All Pig not specified by any Breed Name or Breed Code in the State/UTs to be recorded. The columns 1 to 2 in this block are to be recorded from Schedule 1. The information corresponding to columns 59 to 65 for number of non-descript Pigs with their age and sex are to be collected and recorded.

Grand Total of Pig: The column number 66 refers to Grand Total of Pig in Block 11A or 11B of Schedule 3. It is the sum of column numbers 9, 16, 23, 30, 37, 44, 51, 58 & 65.

6.16 Block 12A & 12B: Species code-13: Rabbit

Angora rabbit (breed code- 01): The columns 1 to 2 in this block are to be recorded from Schedule 1. The information corresponding to columns 3 to 5 for number of Angora rabbit with their age and sex are to be collected and recorded.

Broiler Rabbit (breed code- 02): The columns 1 to 2 in this block are to be recorded from Schedule 1. The information corresponding to columns 6 to 8 for number of Broiler Rabbit with their age and sex are to be collected and recorded.

Grand Total of Rabbit: The column number 9 refers to Grand Total of **Rabbit** in Block 12A or 12B of Schedule 3. It is the sum of column numbers 5 & 8.

Box 6.1

The various breeds of a particular species of livestock as recognized and listed by the National Bureau of Animal Genetic Resources (NBAGR), Karnal only will be considered for this survey. Un-recognised breeds of indigenous species of livestock have been classified as indigenous non-descript.

No change of breed codes other than the code list provided should be recorded by the States/UTs.

States/UTs are advised to collect data on the breeds of indigenous livestock available in their States/UTs while following the Standard list prepared by the NBAGR as per the Appendix provided with the manual

A household may not have livestock of every species and breeds. Start listing of information on various species and their breeds possessed by the household in the order of cattle, buffalo, mithun, yak, sheep, goat, horse, pony, mule, donkey, camel, pig and rabbit.

Chapter-VII

Instructions to field Staff for recording information on age, sex and utility of various breeds in Schedule 3

7.1 Livestock: The number of livestock of various species by their breeds possessed by the household will be filled up in different columns provided for according to their characteristics such as age, sex, present use etc. Information on 13 kinds of domesticated animals and their recognized breeds is to be collected under this schedule. These are Cattle, Buffalo, Yak, Mithun, Sheep, Goat, Horse, Pony, Mule, Donkey, Camel, Pig, and Rabbit. The various breeds of a particular species of livestock as recognized and listed by the National Bureau of Animal Genetic Resources (NBAGR), Karnal only will be considered for this purpose. Un-recognised breeds of indigenous species of livestock have been classified as indigenous non-descript.

Every species of livestock on which information will be collected has been given a two digit code. Within every species of livestock, their recognized breeds have been given a two-three digit code. First two digit will specify the particular breed and third digit '0' will specify original/pure breed or '1' will specify similar to original/pure breed and having more than 50% phenotypic characteristics for cattle, buffalo, sheep and goat to be characterized as graded breed of the same livestock. A list of various types of livestock and their recognised breeds along with a specific code pattern, which will be followed uniformly throughout the country, is given in **Appendix IV (A)**. For identification of phenotypic characteristics of identified breeds the manual as provided by NBAGR can be used as given in **Appendix IV (B)**.

7.2 There are number of breeds of different species of livestock found in the country. Information on a particular type of breed of a species possessed by the household will be recorded in different columns fixed for this purpose. The information of another breed of the same species will be recorded in separate columns fixed for particular Breeds. A household may not have livestock of every species and breeds. Start listing of information on various species and their breeds possessed by the household in the order of cattle, buffalo, mithun, yak, sheep, goat, horse, pony, mule, donkey, camel, pig

and rabbit. After completion of recording of information on every breed of a particular species possessed by the household go for the next species. It may be possible that certain species of livestock may not be available in a household. In such case, go for the next species in the list possessed by the household.

7.3 It may be possible that all listed livestock and their breeds under *indigenous category* may not be found in the state. States are advised to collect data on the breeds of indigenous livestock available in their States/UTs while following the Standard list prepared by the NBAGR as per the Appendix provided with the manual. However, the livestock and their breeds if found place in the list of a state, standard codes as per the code list mentioned above should be given so that there is uniformity in code structures and be helpful in computerizing of the data and its processing. The non-recognised breeds of indigenous livestock may be put together under 'Non-descript' category.

7.4 **States are requested to prepare a separate list of available breeds of cattle buffalo, mithun, yak, sheep, goat, horse, pony, mule, donkey, camel, pig and rabbit along with respective breed codes as per the code list provided with instruction manual so that the same can be used by the enumerator. No change of breed codes other than the code list provided should be recorded by the States/UTs**

7.5 *Instruction for filling up information on Cattle:*

7.5.1 **Cattle as a species of livestock have been given the code '01'**. The broad category of the cattle is Exotic, Crossbred and Indigenous. Exotic cattle are the pure foreign breed of cattle like Jersey, Holstein Friesian. The cattle of purely Indian origins are indigenous. The crossbreeds of Exotic to Exotic or Exotic to Indigenous are classified as crossbred.

7.5.2 **Exotic and Cross bred Cattle:** **Male** Exotic and Cross bred Cattle have been classified broadly in **two** age groups namely; up to 1 ½ years and over 1 ½ years. Information on number of cattle of different breeds possessed by the household will be collected for these broad age groups.

7.5.3 For male cattle of ages above 1 ½ years, the use in which they are being put in by the owner has also to be recorded. For male cattle above 1 ½ years of age, write their numbers in a household as per their usage in the appropriate column. Usage of male

cattle has been classified as 'Breeding only', 'Agriculture and Breeding', 'bullock cart/Farm Operation' and 'Others'. The cattle being used for agriculture only may be grouped with 'Agriculture and Breeding'. Similarly if cattle are being used for bullock cart only, it may be grouped with 'bullock cart/Farm Operation'. If a cattle is being used for agriculture and bullock cart both, group it either with the agriculture or with the bullock cart depending on its major period use. The male total will be calculated by adding the number of male cattle belonging to the age group-up to 1½ year and over 1½ year.

7.5.4 **Female cattle of age above 2 ½ years are to be counted use-wise - 'In Milk', 'Dry' or 'Not Calved Once'.** The female total will be calculated by adding the number of female cattle belonging to the age group under 1 year, 1 to 2 ½ years and above 2 ½ years. The breed total will be the sum of total breed male and total breed female.

7.5.5 **Indigenous Cattle:** In case of Indigenous cattle, all recognized breeds as per the list at Annexure, which are traditionally found in the state or in a part thereof, are to be listed and be coded as per the code list. Indigenous breeds having more than 50% phenotypic characteristics of an identified breed are to be characterized as graded breed. The non-recognized indigenous breeds will be put together under 'Non-descript' category.

Indigenous male Cattle have been classified broadly in **two age groups** namely; under 2 year and above 2 years and Indigenous female Cattle have been classified broadly in three age groups namely; under 1 year, 1 to 3 years and above 3 years. Information on number of Indigenous Cattle of different breeds possessed by the household will be collected for this broad age group.

7.6 Instruction for filling up information on Buffaloes:

7.6.1 The species code of Buffaloes is '02'.

7.6.2 Male Buffaloes have been classified broadly in two age groups namely; up to 2 years and above 2 years. Information on number of buffaloes of different breeds possessed by the household will be collected for this broad age group and Female Buffaloes have been classified broadly in three age groups namely; under 1 year, 1 to 3

years and above 3 years. Information on number of buffaloes of different breeds possessed by the household will be collected for this broad age group.

7.6.3 The recognized breeds of buffaloes which are traditionally found in the state or in a part thereof are to be listed and be coded as per the code list for collection of information. Indigenous breeds having more than 50% phenotypic characteristics of an identified breed are to be characterized as graded breed. The non-recognised indigenous breeds will be put together under 'Non-descript' category.

7.6.4 Assign 14 columns for each breed of buffalo possessed by the household, write breed's name and related code number as per the above list provided in **Appendix IV(A)** and their numbers by age and sex.

7.6.5 ----

7.6.6 Female buffaloes of age above 3 years are to be counted use-wise - 'In Milk', 'Dry' or 'Not Calved Once' and '**others**'.

7.7 *Instruction for filling up information on Mithun:*

7.7.1 The species code of Mithun is '03'.

7.7.2 The recognized breeds of Mithun which are traditionally found in the state or in a part thereof are to be listed and be coded as per the code list for collection of information.

7.7.3 Mithun have been classified broadly in two age groups namely; upto 3 years and above 3 years. Information on number of Mithun of different breeds possessed by the household will be collected for this broad age group for male and female.

7.8 *Instruction for filling up information on Yak:*

7.8.1 The species code of Yak is '04'.

7.8.2 The recognized breeds of Yak which are traditionally found in the state or in a part thereof are to be listed and be coded as per the code list for collection of information.

7.8.3 Yak have been classified broadly in two age groups namely, upto 3 years and above 3 years. Information on number of Yak of different breeds possessed by the household will be collected for this broad age group for male and female.

7.9 *Instruction for filling up information on Sheep:*

7.9.1 Sheep as a species of livestock have been given the code '05'. The broad category of the sheep is Exotic, Crossbred and Indigenous.

7.9.2 The exotic breed like Merino, Rambullet, Carridale etc. be listed and coded as per the codes given. In case of Indigenous sheep, all recognized breeds which are traditionally found in the state or in a part thereof are to be listed and be coded as per the code list. Indigenous breeds having more than 50% phenotypic characteristics of an identified breed are to be characterized as graded breed. The non-recognised indigenous breeds will be put together under 'Non-descript' category.

7.9.3 Sheep have been classified broadly in two age groups namely; up to 1 year and 1 year and above . Information on number of sheep of different breeds possessed by the household will be collected for this broad age group for both male and female.

7.10 *Instruction for filling up information on Goat:*

7.10.1 Goat as a species of livestock has been given the code '06'.

7.10.2 The recognized breeds of goat which are traditionally found in the state or in a part thereof are to be listed for collection of information and be coded as per the code list. Indigenous breeds having more than 50% phenotypic characteristics of an identified breed are to be characterized as graded breed. The non-recognized indigenous breeds will be put together under 'Non-descript' category.

7.10.3 Goats have been classified broadly in two age groups namely; under 1 year and above 1 year for both male and female. Information on number of goat of different breeds possessed by the household will be collected for this broad age group.

7.10.4 Female goats of age above 1 year are to be counted use-wise - 'In Milk', 'Dry' or 'Not Calved Once'.

7.11 *Instruction for filling up information on Horses and Ponies:*

7.11.1 Horses and Ponies look alike. Those having height of 4 feet 8 inches and above are categorized as horses and the rest are the Ponies. The species code for the Horses is '07' and Ponies is '08'.

7.11.2 Like other livestock, the horses and ponies have also been broadly grouped in two age groups namely under 3 years and 3 years & above.

7.11.3 For male horses and ponies of age 3 years and above, information on their usage i.e used for cart/**carriage** and used for sport may be collected.

7.12 *Instruction for filling up information on Mules:*

7.12.1 The species code for Mules is '09'.

7.12.2 Like other livestock, the Mules have also been broadly grouped in two age groups namely; under 3 years and 3 years & above.

7.13 *Instruction for filling up information on Donkeys:*

7.13.1 The species code for Donkeys is '10'.

7.13.2 Like other livestock, the donkeys have also been broadly grouped in two age groups namely; under 3 years and 3 years & above.

7.13.3 Information on two recognized breeds of donkeys namely 'Italian' and 'Desi' will be collected. All indigenous breeds of donkeys may be put together under the category of 'Desi'.

7.13 *Instruction for filling up information on Camel:*

7.14.1 The species code for camel is '11'.

7.14.2 The camel has been broadly grouped in two age groups namely; under 4 years and 4 years & above for both male and female.

7.14.3 The recognized breeds of camel which are traditionally found in the state or in a part thereof are to be listed for collection of information and be coded as per the code list. The non-recognized indigenous breeds will be put together under 'Non-descript' category.

7.15 Instruction for filling up information on Pigs:

7.15.1 The species code for pigs is '12'.

7.15.2 The pigs have been broadly grouped in two age groups namely; below 6 months and 6 months & above.

7.15.3 The information on pigs is to be collected exclusively for exotic, crossbred and indigenous breeds. The recognized breeds of pigs which are traditionally found in the state or in a part thereof are to be listed for collection of information and be coded as per the code list.

7.16 Instruction for filling up information on Rabbits:

7.16.1 The species code for Rabbits is '13'.

7.16.2 Information on male and female population of recognized breeds of rabbits namely Angora, Broiler will be collected.

Box 7.1: Species Code

Name of the Species	Species Code
Cattle	01
Buffalo	02
Mithun	03
Yak	04
Sheep	05
Goat	06
Horse	07
Ponie	08
Mule	09
Donkey	10
Camel	11
Pig	12
Rabbit	13

Appendix-II-Schedules for Breed Survey- Schedule-1 to 3

Appendix-III- Migratory pastoral groups

**Appendix-IV (A) - Breed Name and Breed Codes as approved by
NBAGR**

Appendix-IV (B)- NBAGR Manual for Identification of Breeds-