Lecture Note

on

The System of Collection of Animal Husbandry Statistics in India[1]

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1. Introduction

Animal husbandry statistics are required for various purposes. A major purpose is estimation of production (output) of various products from the sector in the reference year, first at the state level and then at the national level. Output statistics are, however, not sufficient for estimating the *value added* from the sector at either level, which is required for estimation of the State Domestic Product (SDP), as also for national Gross Domestic Products (GDP). For estimation of *value added* input statistics are as well required, such as statistics on various types of feed fed to animals, labour of upkeep, health related expenditure made in the reference year. Statistics on input and output prices are another requirement. Research and planning of the sector's development requires statistics on various characteristics of the animal population, for instance types of breed, threat to indigenous breeds etc. Finally statistics are required for analytical purposes, for you and me, to examine whether the sector is performing well or not, and to suggest measures for improvement.

Like agriculture animal husbandry is a state subject. Therefore, primary responsibility for collection of animal husbandry statistics falls on the state governments, their Animal Husbandry Departments or Directorates of Economic and Statistics. Centre's role is coordination of collection and pooling of state level statistics for national purposes. As you know based on such

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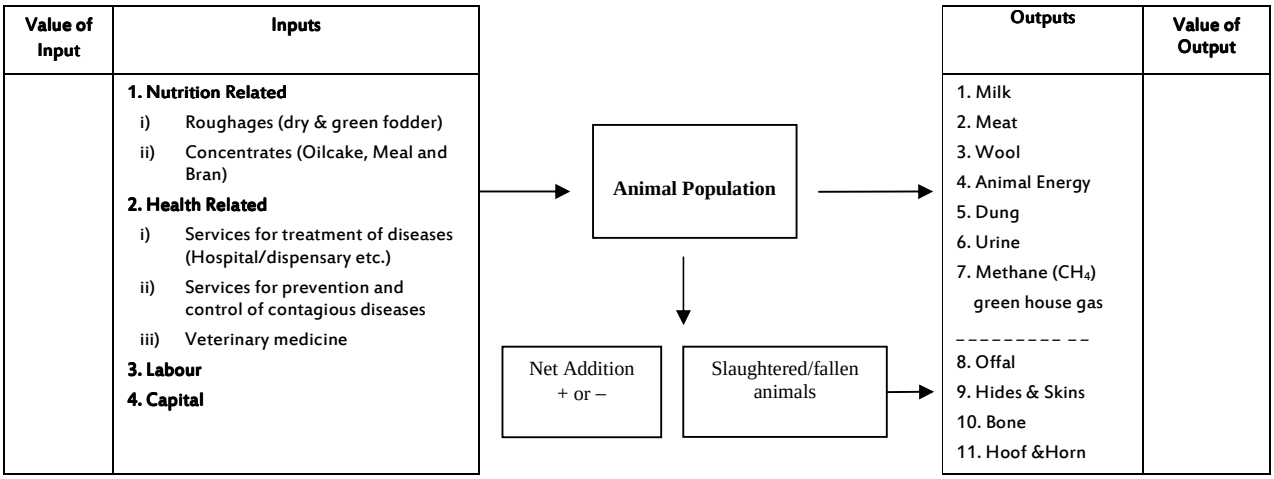
statistics Department of Animal Husbandry and Dairying, Ministry of Agriculture, Govt. of India brings out it's annual publication called *Basic Animal Husbandry Statistics* (website: http://dahd.nic.in).

In order to get a grasp of the system of collection of animal husbandry statistics in the country it is useful to follow a system's approach to the sector as presented in the adjoining diagram. It gives you details of the outputs from and inputs to the animal population in any year. Poultry (birds) are excluded from this. Not that it is not important, but birds don't go well with animals. With this background let us look into collection of statistics, first about animal population followed by outputs and inputs.

System's Approach to Animal Husbandry



Note: [∑ of value of Outputs] — [∑ of value of Inputs] = Value Added.

2. Animal Population Statistics: The Quinquennial Livestock Census

As you know the last livestock census, covering all the states and union territories was carried out in 2007. The preparatory work for the census like preparation of a questionnaire schedule is done by the Dept. of Animal Husbandry at the centre under the guidance of a Technical Advisory Committee. Some of the state governments are represented on this committee. The census is carried out by the Animal Husbandry Departments of the state

governments. Primary data collected from households is transferred to Animal Husbandry & Dairying Dept. of the Centre, which publishes all India and statewise livestock census reports.

3. Output Statistics

Since 1970s output statistics, on the regular annual basis, are supposed to be collected by the state governments using the Integrated Sample Survey design developed by the IASRI originally meant to cover all types of animals and their products, including poultry products and by-products, such as bone, hides and skins. But now the survey is used for collection of data on *four major products:* milk, meat, wool and eggs. Meat output data from all types of animals and poultry birds is collected, however, only from 'recognised slaughter houses'. Thus, the survey does not cover informal slaughtering and meat production in the rural areas and small towns. It is reported that not all states carry out the survey regularly and at scheduled times. And some of them submit to the Centre what are called "official estimates". At the Centre there is a *Technical Committee of Direction for Improvement of Animal Husbandry Statistics* which examines the data submitted and finalises the estimates of the four major products.

4. Input Statistics

The Integrated Sample Surveys on livestock products and related practices are also supposed to collect data on feed and fodder fed to animals, a major input which account for about 75 per cent of the cost, according to earlier IASRI cost of milk production studies. If some states collect feed-fodder consumption statistics, these are not tabulated and made available, at least in the central government publication. So, for the national level there are no statistics on feed-fodder consumption. Regarding collection of statistics on other inputs such as labour, capital or health related expenditure (public and private) the less said is better.

5. Statistics Relating to Values of Outputs and Inputs to the Sector

The Central Statistical Organisation (CSO) is required to estimate values of output from an inputs to the animal husbandry sector in order to arrive at the *value added* by the sector both at the state and the national level in the reference year. Prices apart, quantities of outputs and inputs are of key importance. The estimated quantities of four major products, I mentioned earlier, are supplied to the CSO by the Dept. of Animal Husbandry & Dairying. For other products, using diverse sources, CSO makes it's own estimate. What are those sources and what is the procedure of estimation is not, however, made clear.

The story about input quantities is no better; indeed it is more confusing. As an example consider the quantity of feed and fodder, The CSO proceeds from the side of their production in the reference year. In the absence of scientifically estimated *conversion rates,* CSO applies "conventional rates" to the year's food grain and oil seeds output to arrive at the outputs of dry fodder and concentrates, and similarly output of green fodder. It then assumes that 95 per cent of dry and all of green fodder production is available for consumption of the livestock population. Then it applies a *cattle equivalence scale* to apportion the quantities available for consumption among different categories of livestock. The share of the working animals (bullocks) obtained this way is netted out. And the balance is valued at relevant prices (?) and used for estimation of value added by the animal husbandry sector, possibly at the state level also.

You will see that all this way of doing things indirectly becomes necessary because survey based primary data collected from the field does not exit.

6. Concluding Remarks

You may have noticed that apart from livestock censuses we as yet have no standard or standardised system of collection of animal husbandry statistics in India. Only if Integrated Sample surveys covering all livestock, all inputs and outputs are made mandatory India will have a proper system of data collection. On the input and output side we only have bits and pieces of statistics. In such a situation the estimate of the value added by the sector, in my view, is unreliable.

Further Reading: Dr. V.G. Panse Memorial Lecture by S.N. Mishra, *"The States* of Livestock Statistics in India", *Journal of the Indian Society of Agricultural Statistics,* Vol.11, No.3, December, 1999