

## **Bhutan experience - Cost of production studies/surveys**

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### **Introduction**

In Bhutan, the government statistical functions is decentralized. The ten ministries and several other autonomous agencies have their own statistical units which collect and disseminate the relevant statistics. The National Statistics Bureau (NSB) is one of the several autonomous agencies, and although it is considered as the apex body for the country's statistics, it has no regulatory authority over the statistical units of the ministries and other agencies. Bhutan still does not have a Statistics Act and as such NSB has no statutory mandate to oversee the statistical activities of agencies other than itself. As and when required the statistical units of the ministries may seek technical support from NSB during surveys and censuses, but in general the units function independently.

The NSB is hence itself a statistical collection agency until such time when an act may give it some teeth. So far it has drafted a document called National Statistical Development Strategy (NSDS) which outlines how NSB itself and the other statistical units in the various ministries should function, however, it has hardly made any impact. Most recently, NSB has drafted yet another document called Bhutan Statistical System (BSS) which proposes to enlarge the NSB's institutional size as well as human resource and to bring other statistical units of the ministries under its direct administration, however, it has received lukewarm response from the other stakeholders and is currently under review by the Royal Civil Service Commission (RCSC).

In the meantime, NSB just like any other statistics collection body, conducts the 5 yearly Bhutan Living Standards Survey, the 10 yearly Population and Housing Census of Bhutan and several other thematic-based surveys.

Elsewhere, all statistical matters related to agriculture, livestock and forestry are conducted by the statistical unit of the Ministry of Agriculture and Forests (MoAF). The MoAF conducts the 6 monthly crop production survey, the annual livestock population survey and the 5 yearly agriculture census. The agriculture census is a very important activity as it provides the frame for

the intervening sample surveys. These 3 main statistical activities are a regular feature for which the MoAF allocates assured budget and relies heavily for planning and monitoring purpose. Adhoc surveys are frequently conducted as per the needs and are often determined by availability of fund support from within or outside entities.

Having briefly described a bit of the institutional aspects of statistical functions in Bhutan, we will now describe in the following sections on the experiences, challenges and way forward with regard to cost of production survey/studies related to agriculture.

## **Experiences**

Cost of production (CoP) surveys or studies are not conducted by MoAF on a regular or scheduled manner. Although it is common to see development practitioners and policy makers frequently seeking information on CoP of most crop and livestock commodities, yet CoP surveys have received very little attention in terms of featuring as a regular scheduled activity on the MoAF's calendar of surveys.

CoP surveys are thus done on some care cases, such as when farmers complain about receiving low price for their farm products, or when government has some plans to establish minimum support price for some commodities. In such cases, the CoP surveys are usually done by some consultants. Most CoP studies that we are aware of were of small scale nature, usually confined to a district or locality. For instance in the year 2015, when poultry farmers of Trashigang Dzongkhag (Dzongkhag is synonymous to a district) felt that their eggs were fetching 'low' price, and kept complaining to the government for intervention, the MoAF commissioned a CoP survey in that locality to determine the CoP per egg. The survey calculated the CoP per egg to be Nu. 5 per egg and that the farmers' selling price was Nu 12/egg. The farmers were told to stop complaining and instead feel happy.

Having said that, there was however one notable nationwide CoP survey done in 2012 by a national consultant, with fund support from SNV, a Dutch NGO. This was done with the objective of calculating the CoP of major vegetable commodities so that there is a basis for setting the minimum support price in case the government had to buy the vegetables from the farmers when they are unable to sell in the market. As part of the consultancy ToR, most extension workers were also

trained on the basics of collecting data and calculating CoP. We will not go into the detail of this study's methodology, but the survey basically found out that the biggest share of the cost was due to wages for labour. This is obvious because in Bhutan, farms are mostly on rugged terrain and farm mechanization is quite difficult. In general, farming is quite a drudgery and young able-bodied people migrate to the urban areas in search of easy jobs. This creates labour shortage in the rural areas and wages have thus kept increasing since few decades ago.

Soon after the CoP figures were available from the above study in 2013, the MoAF in fact started a minimum support price scheme for vegetables. The scheme is only for vegetables and not for other products like cereals, fruits or livestock products. This is because there has never been any marketing issue with products other than vegetables.

Under the minimum support price scheme, if any farmer is unable to sell his vegetables in the open market, he/she can bring to the one-stop-farmers'-shop who will buy at the minimum support price set for the particular vegetable. Till date however, none of the 118 one-stop-farmers'-shop across the country have seen a farmer come to dispose off his/her vegetables in return for the minimum support price.

This is obvious because in recent years, locally grown vegetables are sought after in the market for their freshness, appeal and little or no chemical residues. The rampant use of plant protection chemicals for mass production of vegetables by the Indian growers across the border and cheaply imported into Bhutan is well known by now and Bhutanese consumers are very wary of imported vegetables, no matter how cheap they are. This issue is not just based on hear-say but on evidence. The Bhutan Agriculture, Food and Regulatory Authority (BAFRA) conducts regular tests on the imported vegetables for chemical residues and in recent years had to implement temporary ban on import of several vegetables like chili, cabbage, beans and cauliflower. The tests showed that residue levels were several times beyond the permitted levels. This developments have been a blessing for the local growers who are enjoying good market for their produce.

## **Challenges**

What are the challenges with regard to CoP survey programs in the MoAF? This is quite difficult to answer in a straightforward manner because as mentioned above, the MoAF does not have

experience dealing with CoP surveys as a regular feature. Nonetheless, perhaps we can say that not having CoP surveys as regular and systematic manner itself is a challenge because the MoAF have no access to updated CoP figures if required for policy decisions. To implement a regular and systematic CoP surveys into the existing survey calendar will also be a challenge because the MoAF does not have adequate number of statistical staff to implement additional surveys devoted to CoP. The MoAF heavily relies on the extension workers in the Gewogs (same as sub-districts) to collect the existing survey activities. Since survey activities are not part of their primary job, they often complain of being overburdened. Surveys are costly affairs and to implement additional and separate surveys for CoP will be a challenge on government budget.

### **Way forward**

Nevertheless CoP surveys/studies are very important for generating information required for making good policy decisions. It is estimated that 58% of the labour force are engaged in agriculture (MoLHR, 2015). If we include the dependents of these 58% people, up to 75% of Bhutanese population may be dependent on agriculture as source of livelihood. Knowing the CoP of agricultural commodities is hence very important in order to use the figures for designing policy interventions aimed at increasing their welfare.

One option would be to include additional questions into the existing survey questionnaires so that if not for all at least the major commodities like rice, maize, potato, apple, milk, eggs etc can be accommodated to produce the CoP. Of course interviewing farmers to recollect costs of inputs and labor is a very problematic issue. Another option to try would be to make selected farmers in each Gewog to maintain diary of the activities and the associated inputs and collect the diaries at the end of a season for calculating CoP. With repeated exercises, farmers can become experts at keeping records and produce reliable figures.