

**COMMENTS OF FOREIGN EXPERTS****Comments of German Expert**

<b>Subject:</b> FW: Comment of German expert on Livestock Census
<b>From:</b> "Struck Bernd GTZ PK" <Bernd.Struck@gtz.de>
<b>Date:</b> Sat, March 31, 2007 2:16 pm
<b>To:</b> <a href="mailto:agcensus@lhr.paknet.com.pk">agcensus@lhr.paknet.com.pk</a>

Dear Mr. Liaqat,!

Enclosed you will find the comment of a former colleague and friend of mine, Dr.Hans-Siegfried Grunwaldt. He was Head of Agricultural Statistics Division of Statistics North, Germany, and was Member of the workshops Animal Production, Plant Production and Farm Structure of Eurostat in Luxemburg. He also was expert on agricultural statistics in various other countries. He perused the draft of publication on Livestock Census. You will see that his overall impression is a very positive one. He would agree if we would enclose his comment in the envisaged publication.

Kind regards

Bernd Struck  
Principal Advisor  
GTZ-Project Support to Federal Bureau of Statistics

Dr. sc. agr. Hans-Siegfried Grunwaldt

March 19, 2007

**Comments to draft of Report on Livestock Census of ACO**

The overall impression is that the report is well structured. It is very comprehensible in explaining organization, enumeration and data processing of the Livestock Census in Pakistan. The concept capturing all big units in combination with the three-staged sampling approach (provinces - mouzas / villages – households) is appropriate for Pakistan with its huge number of observation units. It matches international standards for conducting such surveys. Efforts for training and guidance of enumerators / interviewers have been of considerable amount. The four pages of the questionnaire are clearly structured and widely self-explanatory.

It is appreciated that the report gives hints to some weak points as, for example, in the notes on page XXXVI. Also positive is that the results have been checked by a follow-up survey past to the Census. With regard to the totals of cattle,

buffaloes, sheep and goats the rates of overestimation are within tolerable margins. In the large province of Punjab it is 1 to 2 %, only, while in NWFP and in Balochistan the deviation between the Census and its control sample survey is expectedly higher (page XXXI of report). It is proposed to calculate and to monitor the sampling error for all cells of the tables.

The definitions and explanations (page XXXIV & XXXV of the report) are understandable and easily remembered. With regard to the milk animals, however, it would be wise to define “cows, buffaloes and goats in-milk” more precisely. From the questions “female goats 1 year and above in-milk” and its sub-position “... whose milk is consumed by human being” I guess that in-milk animals are meant as those to be milked plus those nourishing the young animals by suckling, only. In European Union statistics there is a bifurcation between milk cows (dairy cattle) and other cows (beef cattle). In European Union statistics cows are recorded as such when they are two years old while in Pakistan it is three years. I know that the breeds of cattle typical for Pakistan need more time to achieve their sexual maturity which to some extent is due to extensive raising. It is, however, to be questioned how far female cattle and female buffaloes below three years of age have already given birth to calves and thus would have to be counted as cows.

On page XXXVI the report mentions severe problems to capture changes in the stocks (section VI of the questionnaire). I suppose that the figures of tables 23 and 24 lack from reliability. Obviously the households had been reluctant to give insight in their domestic slaughtering and sales and purchases. I calculated the births (male and female) of the last 12 month per numbers of mother-animals and resulted in a birthrate of 45 % with cattle cows, 49 % with buffalo cows, 66 % with sheep, 63 % with goats and only 11 % with camels. For cattle, buffaloes, sheep and goats I had expected rates of double amount.

I also checked the changes in stocks. The decreases in the stocks can be calculated as “SLAUGHTERED ON EID-UL-AZA” + “SLAUGHTERED ON OTHER DAYS” + “SOLD OUT” + “DIED” – “PURCHASED”. If calculated like that the decreases in stocks are equivalent to 34 % of the (already under-reported) births of cattle, 27 % of the births of buffaloes, 35 % in case of sheep and 43 % with goats.

The comparison with the previous Census (page V of the report) evidences a considerable increase of stocks. This is plausible with regard to the kinds

and types of animals. For sheep, however, the stock of young animals (below one year) has increased by 22.3 % while the stock of the female animals elder than one year has increased by 3.5 %, only. It would be helpful to have an explanation for that. Could it be change of utilization of animals resulting in extended raising?

The time of data collection is dispersed over time and regions between September 2005 and July 2006 (pages XIX & XX of the report). In European Union statistics we try to conduct data collection as far as possible at a common point of time. Stocks of animals might vary seasonally and thus might have an impact on the regional results of this Census. I guess in spring/summer more calves might be born than in autumn/winter. This could explain that in N.W.F.P. (Census between March and June) 72 % of the cattle cows had been in-milk, whereas in Punjab (Census between September and January) the rate was 62 %, only. Moreover, it is not indicated whether or not the previous Census has been conducted at the same point of the season as the present Census.

Tables 1 to 18 give a very good picture of the households, their livestock, the categories of utilization, the age and sex of the animals, the breeds and the size and structure of the herds both in totals of Pakistan as well as per Province. It would be of interest to have additional information of the total number of households (with and without animals) vis-à-vis the number of households with animals of any kinds. In the tables the number of households is given per kind of animal. Tables 19/20 give useful information about a still small extension of artificial insemination for cattle and buffalo breeding varying considerably between the provinces of Pakistan. The reasons of the households for not utilizing it are clearly pointed out. According to tables 21/22 households still keep a lot of work animals of different species and categories for several work purposes. A comparison with the previous Census would be of interest. The description of the sampling techniques is very good.

In the soft copy of the report it is very useful to get more detailed information just by a mouse-click on headers of the tables or on some figures. This is nice technical support.

My overall impression while perusing the report is extremely positive with regard to the meticulous work done for this Census. The quality of its results is absolutely comparable to that of most countries worldwide.

## **Comments of FAO Expert**

**Subject:** FW: AN 9/1, ST 27/1 :Pakistan Report of Livestock Census 2006  
**From:** "Iqbal, Wajiha (FAOPK)" <wajiha.iqbal@fao.org>  
**Date:** Mon, March 12, 2007 1:55 pm  
**To:** [agcensus@lhr.paknet.com.pk](mailto:agcensus@lhr.paknet.com.pk)

Dear Mr. Hamdani,

This is with reference to your letter along with Pakistan Report of Livestock Census 2006; following are the comments from Mr. Hans Wagner, FAORAP, Bangkok on the report.

This is for your information and record please.

Thanks and regards.

Sayed Mohammad Ali  
Assistant Representative

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**From:** Wagner, Hans (FAORAP) [mailto:Hans.Wagner@fao.org]  
**Sent:** Wednesday, March 07, 2007 11:21 am  
**To:** Iqbal, Wajiha (FAOPK); Steinfeld, Henning (AGAL); Som, Hiek (ESSS)  
**Subject:** RE: AN 9/1, ST 27/1 :Pakistan Report of Livestock Census 2006

Dear all,

I have gone through the report it is an important piece of work providing substantial information.

Regards  
Hans