

Nigeria Agricultural Policy Project Highlights

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Project Scholars support nationwide discussion on agricultural data collection in Nigeria

Sustainable Agricultural Data Collection in Nigeria: What can we learn from the USA?

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The United States of America (USA) has been collecting data on the nation's agriculture since U.S. marshals inquired about families' agricultural pursuits in 1820 (USCB 2017). This history of collecting data dates back as far as President George Washington, who kept meticulous statistical records describing his own and other farms. The 1790 census counted some 4 million Americans with 9 out of 10 of them living on farms when the modern distinction between producers and consumers did not exist. Concerns at that time were about what crops to plant and how to ensure a bountiful harvest. In 1791 President Washington, motivated by an inquiry from an Englishman, Arthur Young, wrote to several farmers requesting information on land values, crops, yields, livestock prices, and taxes. That was effectively the first agricultural survey in the USA. Washington prepared the survey and compiled the results as well. In the period between September 24 and November 18, 1791, he shared the results with Young in three letters. The letters represented what can be termed the nation's first crop report providing agricultural statistics on an area extending roughly 250 miles from north to south and 100 miles from east to west. The strip was in an area which today covers Pennsylvania, West Virginia, Maryland, Virginia, and the District of Columbia, where most of the young country's population lived.

The 1839 effort of Henry Ellsworth (first Commissioner of the U.S. Patent Office) to prevail over congress to designate \$1000 for collection and distribution of seed, carrying out agricultural investigation and procuring of agricultural statistics

was the next major leap in the process of agricultural data collection in the USA. Detailed agricultural information was gotten in 1840 through the first agriculture census which provided a nationwide inventory of production. The information from the 1840 census combined with information from other sources was utilized by Ellsworth to estimate production by states and territories. The estimation was done yearly through 1844, establishing the general pattern of annual agricultural reports that continues to this day (USDA 2017).

The United States Department of Agriculture (USDA) which was then known as "The Peoples Department" was established by Abraham Lincoln in 1862. Its first crop report was published in July 1863. The origin of National Agricultural Statistics Services (NASS) can be traced back to 1863, when USDA established it as a Division of Statistics. During the Civil War (1861–65), USDA collected and distributed crop and livestock statistics through NASS that helped farmers to assess the value of the goods they produced. This helped in significantly reducing the problem of information asymmetry (USDA 2017).

The Crop Reporting Board of the USDA, now known as Agricultural Statistics Board was created in 1905 as part of efforts towards reorganization of USDA for better service delivery. Further reorganization of USDA in 1961 gave birth to the Statistical Reporting Service which is known today as National Agricultural Statistics Service (NASS) of which the Agricultural Statistics Board is a part. The Board prepares and releases the NASS reports. It is made

up of a permanent chairperson and secretary, and other NASS staff members chosen to participate in the preparation of specific reports based on their detailed knowledge of a particular topic (USDA 2017)

NASS as a body conducts hundreds of surveys annually on topics including agricultural production, economics, demographics and the environment. In addition to that, every five years NASS also conducts the Census of Agriculture which serves as the only source of uniform, comprehensive agricultural data for every county in the United States of America. (USDA, 2017). Surveys conducted by NASS cover the following areas: agricultural chemical use, agricultural yields, agricultural prices paid and prices received indexes, agricultural prices received and price received indexes, agricultural resources management, agricultural survey, bee and honey, broiler hatchery, cash rent, cattle inventory, catfish production and processing, census of aquaculture, census of horticultural specialties, chicken and eggs,, cold storage, conservation effects assessments, cotton ginning, county agricultural production, crop progress/conditions, crops stocks, current agricultural industrial reports, dairy products, dairy products prices, farm and ranch irrigation, farm labor, floriculture, fruits and nuts, Hog inventory, horticultural specialties, livestock slaughter,, local food marketing practices, milk prices, milk production, objective yields, off farm grain stocks, on-farm energy production, organic agriculture, poultry slaughter, sheep and goat inventory, tenure ownership, trout production, turkey hatchery, turkey raised and vegetables (USDA,2017). NASS uses an online platform to send survey questions to farmers and to obtain responses. (USDA, 2017). As mentioned earlier, all the categories of surveys listed above are conducted annually with the exception of the census of agriculture which takes place every five years. No matter what type of data, the paper version of the questionnaire is considered as the master questionnaire while the web as well as the Computer Assisted Telephone Interview (CATI) instruments are patterned after the paper instrument (USDA, 2017). Every year, the content and format of the

questionnaire are evaluated following a specific process where request for changes goes through evaluation and approval/disapproval. Changes made may vary from wording of questions, to format or deletion, modification or addition of new questions. In case of a major modification, the instrument is pretested by NASS survey methodologist (USDA, 2017). All federal data collection require approval from the Office of Management and Budgeting (OMB) and there must be an active OMB number for every survey which gives NASS the authority to conduct the survey. NASS must document the public need for any form of data, evidence that instrument design follows sound statistical and ethical practices as well as that such data do not already exist elsewhere. In each instrument, there must also be a statement of the purpose of the survey, the use to which the collected data will be put and a burden statement which gives an estimate of the time required to complete the form (USDA, 2017). In all surveys, sampled farms/ranches receive a pre-survey letter that explains the survey and notifies them that they will be contacted for the sole purpose of survey; the questions to be asked are attached to the letter. This gives the potential respondent the opportunity of being fully prepared and also gives a pass code that can be used for the online survey (USDA, 2017). The modes of data collection that are available to field officers include: mail, CATI, and personal interviews. While the mail option is the cheapest, the short duration of most surveys and the uncertainty of postal delivery limits the use of the method while the use of personal interviews is largely restricted to large operations or those with special handling requirements (USDA, 2017).

KEY REFERENCES

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