



Demographic and social characteristics of the agricultural producer's households

Susana Pérez*

INEGI, General Direction of Economic and Agricultural Censuses

Aguascalientes, México

susana.perez@inegi.org.mx

DOI: 10.1481/icasVII.2016.f34c

ABSTRACT

The Food and Agriculture Organization of the United Nations (FAO), in its “World Programme for the Census of Agriculture 2010” and “Global Strategy to Improve Agricultural and Rural Statistics”, recommends capturing the demographic and social characteristics of the household members of a producer that performs agricultural operations, regardless of whether it is the household's predominant activity or only a secondary source of income.

Knowing the characteristics of the population that lives directly on agricultural or livestock activity, allows a better study of the conditions under which rural producers perform their duties, and provides more elements to perform various analyzes of its economic and social environment, thus contributing to the design of public policies and support programs.

In Mexico, projects that generate social-demographic statistics provide the country with a wealth of information on the characteristics of the population and, although these statistics account in particular localities with fewer people, they do not provide specific data on households located in rural areas, in which the persons responsible of the management and decision making of the agricultural and forestry production units live.

Therefore, taking advantage of the performance of the National Agricultural Survey 2014 conducted by the National Institute of Statistics and Geography (INEGI), a complementary chapter was included in the questionnaire, which guaranteed the collection of the producer's data and of the people living in the dwelling. This yielded information on aspects such as kinship, age, gender, economic dependence, indigenous self-description, indigenous language, education and participation in farming or other economic activity.

This paper is aimed at presenting various shades of the agricultural producer's household, such

as:

- Economic and social characteristics of the small, medium and large agricultural producers
- Characteristics of the production units run by women farmers
- Characteristics of the production units run by indigenous farmers
- Economic and social characteristics of the persons performing family agriculture
- Production units' social characteristics according to producer's schooling
- Characteristics of both households whose economic dependence comes entirely from farming as those households where agricultural production is a marginal activity.
 - Characteristics of rural households in the different regions of the country.

Keywords: sociodemographic, farming, livestock, support programs.

Introduction

The 2014 National Agricultural Survey

In this context, the National Institute of Statistics and Geography (INEGI), conducted the 2014 National Agricultural Survey (2014 ENA), which was conceived as a survey for exploiting data on the main species produced in the agricultural sector in Mexico.

2014 ENA is the second from a series of surveys that INEGI has raised as part of an agricultural information system that provides structural information and in both structure and the circumstances surrounding the sector to meet the data requirements of the primary sector, thus contributing to decision-making and to the definition of programs for the producers and country benefit.

Selected products for 2014 ENA are those that generate higher added value in the agricultural and forestry sector in Mexico and that are considered in the laws and programs that regulate objectives, priorities and policies for economic growth, and particularly for the Agricultural sector.

Thus, the final list for the survey includes 34 priority products:

Agricultural products: white corn, yellow corn, forage maize, sugar cane, wheat grain, avocado, grain sorghum, beans, chili, alfalfa, tomatoes, potato, melon, watermelon, coffee, orange, grape, banana, lemon, mango, onion, pumpkin, zucchini, green tomato, cotton, apple, cocoa, rice, barley and soybeans.

Livestock products: cattle, milk, pork, poultry and eggs.

As well as nine more products that are significant in some regions of the country:

Agave in Jalisco; forage oats in Chihuahua, Mexico City, Durango, State of Mexico and Zacatecas; coconut in Colima and Guerrero; strawberry in Michoacan; guava in Aguascalientes, Michoacan and Zacatecas; nopal vegetables in Mexico City; pine in Chihuahua, Durango and Michoacan; forage sorghum in Coahuila, Nuevo Leon and Sonora; and blackberry in Michoacan.

2014 ENA, estimated 3.8 million production units that cultivated or exploited from the above products. Final data are supported by the design of a probabilistic sample, except for four products (poultry, eggs, pine and blackberry), where a deterministic design was applied.

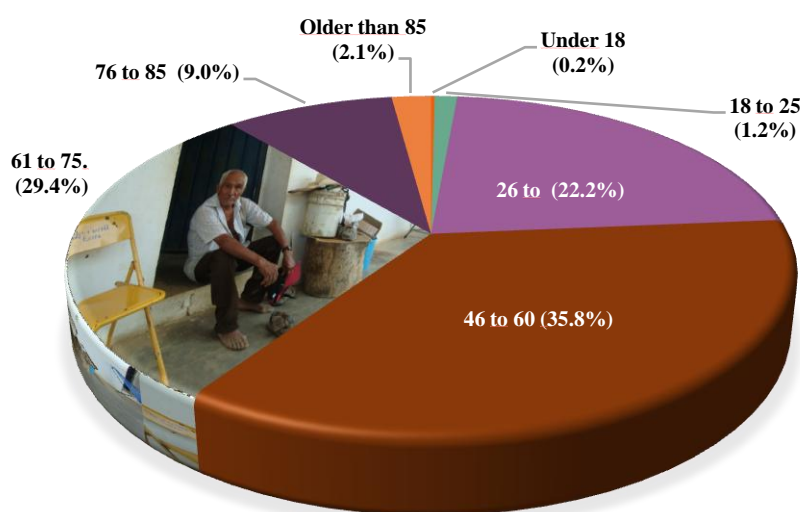
This survey provides information on the supply of food products; needs and employment opportunities in the field; the participation of women in farming and livestock activities; the destination of crops; technological innovations for production; degree dependence on fertilizers and other inputs; the needs of natural resources; water and irrigation systems benefits; seeds availability; use and deterioration degree of vehicles, tractors and machinery; financing; insurance; the main problems producers' deal with; and social and demographic characteristics of people living from agricultural production; among other topics.

Overall, the results of this survey provide a wide range of possibilities to know about quantitative and qualitative information from agricultural and forestry production units; specifically, the results of the 2014 ENA provide insight into typologies from the producer and the members of his household, such as kinship, age, sex, education, economic dependence, indigenous self-identification, indigenous language and participation in farming or other economic activity, as shown in the following sections.

Age and education of farm producers

Obtained data reflect one of the biggest current problems in the Mexican countryside, which is the producers' age: 76.3% are 46 or older, and from that percent, 40.5% specifically reported to be older than 60 years old; i.e. agricultural activities are not being undertaken by new generations, and that includes producers' children.

*2014 National Agricultural Survey
Producer's age (%)*



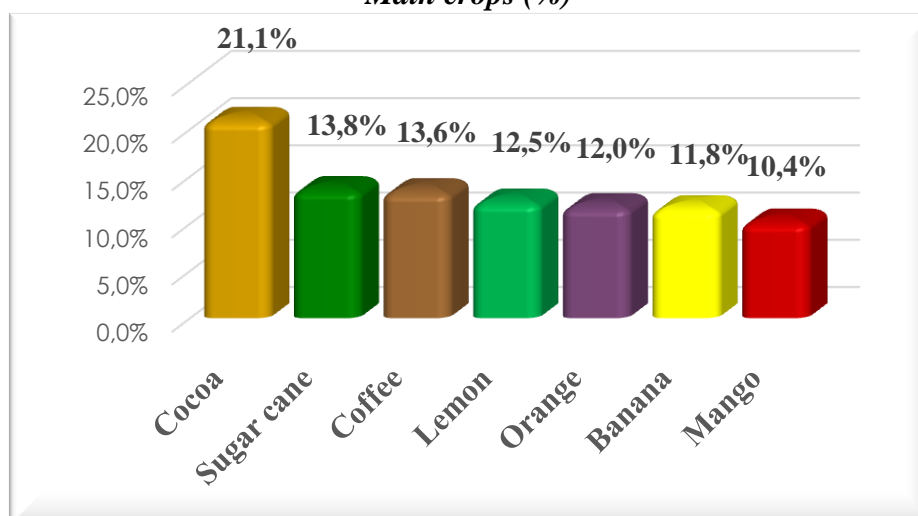
Concerning education level of the producer's and people living in farm households, most producers have an elementary education level (57.6%) and only 9% reported a high school education level or higher; in comparison, the percent of inhabitants of the country, not in the agricultural sector, shows a tendency to have higher education levels, since 17.7% achieved a high school education level or higher. By comparing these data with those of the total population, it can be determined that, in general, the education level of rural producers and their families is below the average of the total population, where

26.8% studied high school or has a bachelor's degree (according to the 2010 Population and Housing Census in Mexico).

Production units managed by women and participation of women

From surveyed production units, 11.3% are under women's responsibility. In the case of crops, according to production volume, participation of female producers stands out in obtaining cocoa, sugar cane, coffee, lemon, orange, banana and mango.

*2014 National Agricultural Survey
Production units whose owner is a woman
Production volume according to total national production
Main crops (%)*



The participation in labor force in agricultural activities was of 17 women per every 100 male workers; female participation is higher in the farming activities (18.1%) than in cattle activities (15.8%).

It can be established that the participation of women in agricultural activities is significantly lower than the participation in not agricultural activities, where, in average, there are 44 women for every 100 persons employed (according to data from 2014 National Economic Censuses in Mexico).

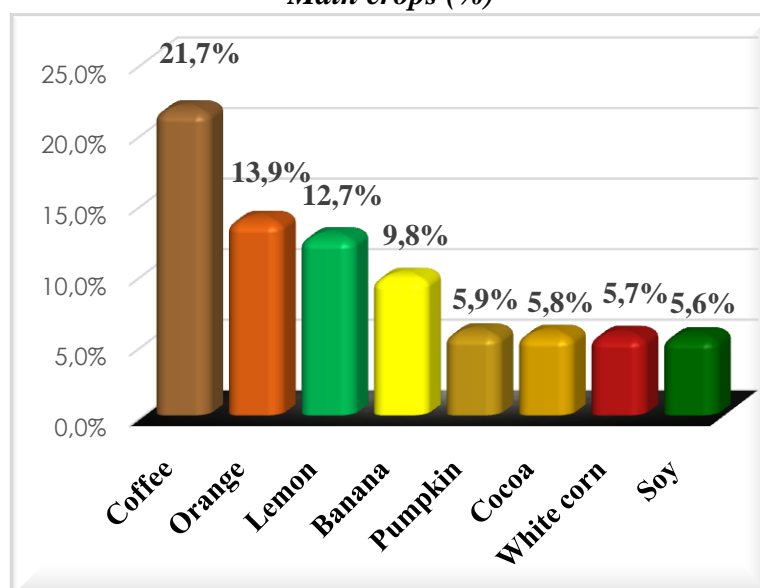
Production units of indigenous self-identification

One of the concepts that was collected in 2014 ENA is the term *indigenous self-identification*, i.e. if the farmer considers himself indigenous because of his ethnicity or for preserving the customs and traditions of his ancestors.

The result indicates that 18% of the surveyed producers were self-identified as indigenos, of which 81.8% stated speaking a native language.

Consequently, 18% of agricultural production surveyed units, are led by an indigenous producer, but that only represents 8.5% of production volume. The main crops they produce are coffee, orange, lemon, banana, squash, cocoa, white corn and soybeans.

2014 National Agricultural Survey
Production units whose owner identifies himself as indigenous
Production volume according to total national production
Main crops (%)



4.6% of bovine stock and 3.8% of pig stock nationwide, correspond to the production units whose holder identifies himself as indigenous.

Regarding the destination of the production, 53.8% is destined to self-consumption (47.9% to cattle, 4.9% to the family and 1.0% to sowing seed), 43% goes to sales and 3.2% corresponds to losses for wastage.

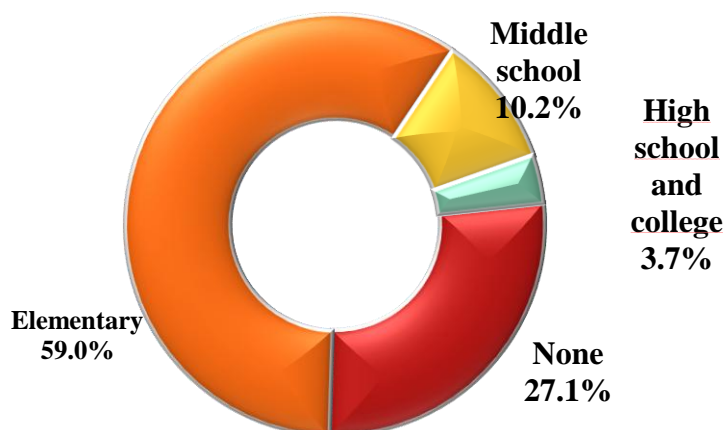
2014 National Agricultural Survey
Production units whose owner identifies himself as indigenous
Production volume by destination (%)

Destination of production	Indigenous production units	Total production units
Sale	43.0%	73.4%
Household consumption	4.9%	1.6%
Cattle consumption	47.9%	20.5%
Seed for sowing	1.0%	0.9%
Losses for wastage	3.2%	3.6%

Self consumption (53.8%)

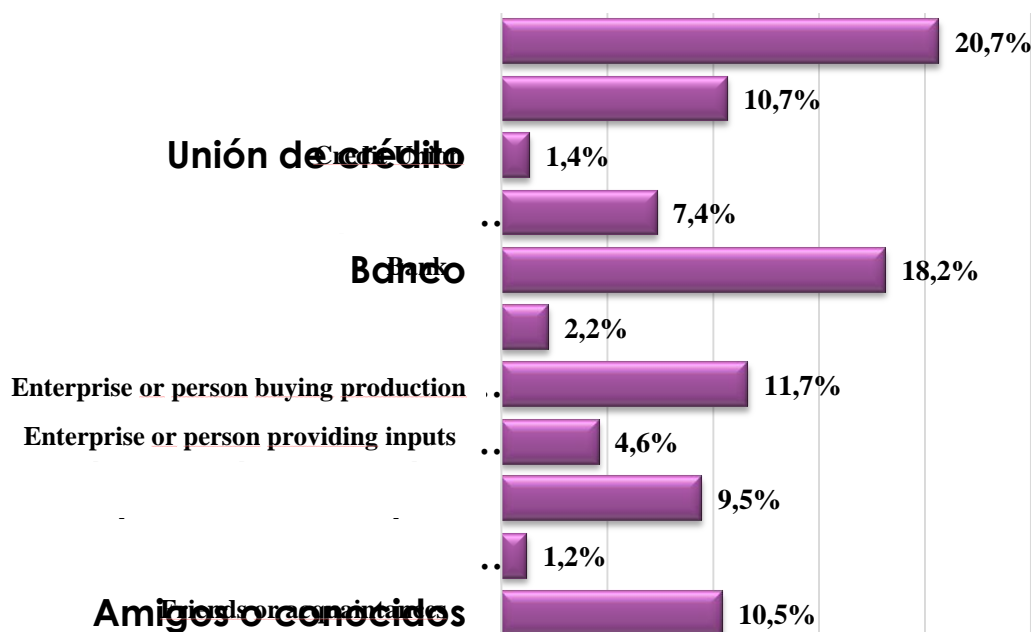
In production units led by indigenous, one of each five employed persons are women and four are men. As for schooling, 27.1% have no educational level, 59% have some elementary grade, 10.2% some middle school grade and only 3.7% reported to have studied high school, or college.

2014 National Agricultural Survey
Production units whose owner identifies himself as indigenous
Education and indigenous language speakers (%)



4.8% of the production units whose holder identifies himself as indigenous, obtained some type of financing for his agricultural activities with savings banks and banks as their main suppliers.

2014 National Agricultural Survey
Production units whose owner identifies himself as indigenous
Sources of credit or loaning
4.8% of indigenous production units obtained credit
(Percentage is 10.4% at national level)



Family Agriculture

A subject in which international agencies have special interest is "Family agriculture", in order to define public policies aimed at supporting these types of units (according to the Center of Studies for Sustainable Rural Development and Food Sovereignty of the Chamber of Deputies, family agriculture is defined as *agriculture that is performed predominantly with the work of the producer and his family*). For 2014 ENA results, the units that reported only family labor without receiving a wage or salary were considered as family agriculture production units (all units that reported having hired any type of personnel for agricultural work were excluded).

Under this definition, 32.6% of the agricultural production units in Mexico perform family agriculture, which represents 9.9% of the production volume.

As for the products generated by these units, the cultivation of cocoa, beans, white corn, orange and coffee stand out. Also, 15.5% of bovine stock and 8.8% of pig stock are located therein.

As in production units under responsibility of indigenous, most of the production is destined to sales (53.9%), while self-consumption represents 38.6%, (where cattle consumption predominates with 47.9%). The wastage in this case represents 7.4%.

Another interesting aspect is the type of buyers, where intermediaries stand out (34.9% of total production), followed by the final consumer (17.2%) and packing and processing industries (5.4%). And to a lower extent, the sales to commodity markets, malls and supermarkets, among others.

2014 National Agricultural Survey
Production units that perform family agriculture
According to sales of agricultural production (%)

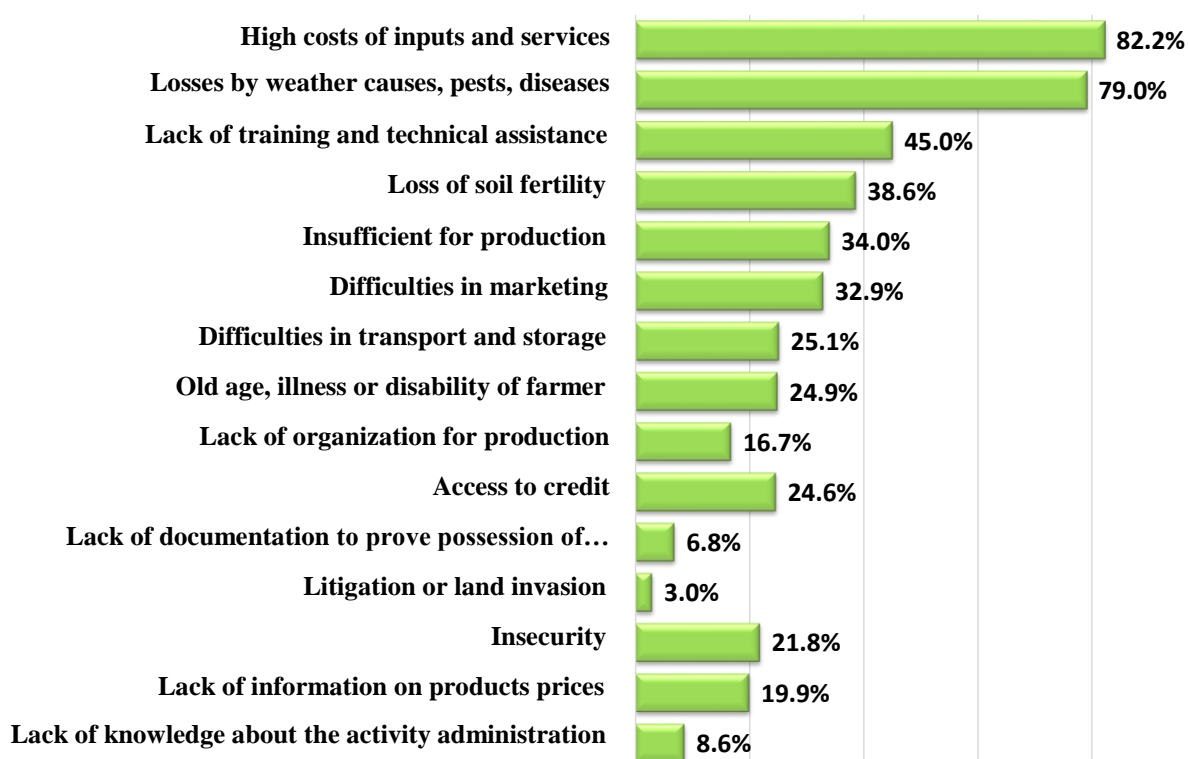
Addressee of sold production	Production units that perform family farming	Total production units
------------------------------	--	------------------------

Directly to consumer	17.2%	24.5%
Intermediary (broker)	34.9%	45.0%
Commodity markets	1.4%	2.6%
Malls or supermarkets	0.5%	0.8%
Packing or processing industries	5.4	5.0%
Other country	0.0%	0.1%
Other buyer	2.5%	2.6%

On another issue, 6.2% of the production units that perform family agriculture obtained some type of credit, mainly from savings banks.

It is worth noting that family agriculture production units reported that their main problems to carry out their agricultural and livestock activities are the high cost of inputs and services (82.2% of the units), losses due to weather causes, pests and diseases (79%) and lack of training and technical assistance (45%).

2014 National Agricultural Survey
Family agriculture production units
Problems presented during the development of the activities of agricultural production units (%)



Conclusion

ENA 2014 was created as survey that considers several matters of interest from institutions that regulate, assess and determine support programs for forestry and agriculture producers. Its results a wide range of possibilities, which allows us to know among other topics: particularities of women, farmers, important features of family agriculture and the conditions of production for indigenous producers. ENA 2014 provides significant indicators for public policy to be focused on supporting disadvantaged groups, by implementing practices that meet their needs.

References:

<http://www.cedrssa.gob.mx>

<http://www.inegi.org.mx/est/contenidos/proyectos/encuestas/agropecuarias/ena/ena2014/>