

# Survey of Feedstuffs for Ruminant Production in Honduras

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## Introduction

Many Central American countries such as Honduras are considered food insecure because of a lack of sustainable food sources and structured food producing capabilities. Furthermore, ruminants play a vital role in food security due to their capability to produce high-quality protein from feed sources not suitable for other species. In addition, many Honduran producers do not understand or have the capability to evaluate the relationship between price of a feedstuff relative to animal performance tradeoffs.

Moreover, in an effort to develop a sustainable cattle feeding system in Honduras, properly integrating byproduct feeds is pivotal. In order to accomplish this goal, it is imperative to understand the availability of feedstuffs throughout different geographical regions and the nutrient composition of these feeds.

## Objectives

- Acquire pricing and seasonal availability of feedstuffs in Honduras.
- Develop a preliminary catalog of available feedstuffs in Honduras.
- To use compiled information to help Honduran cattle producers feed properly formulated diets, thus enhancing cattle growth efficiency.

## Nutrient Composition of Feedstuffs

Ingredient	Crude Protein %	Carbohydrates%
Corn meal	7.5	76
Soybean meal	48	35
Citrus pulp	5.5	57
DDGs	27.5	16
Molasses	4.7	77
Palm kernel meal	18.3	55

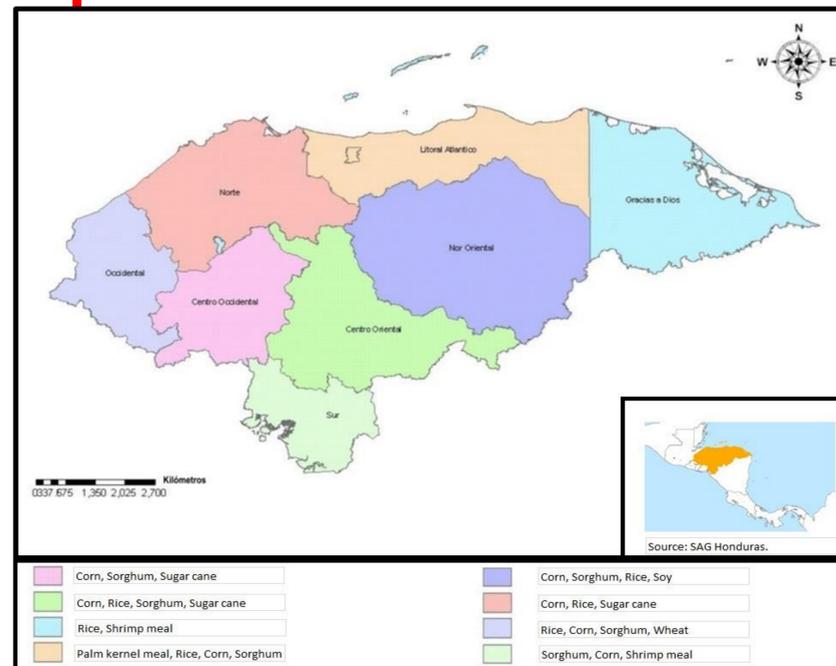
## Methodology

An eight question, comprehensive survey was developed to gain an understanding of the current production systems and available feedstuffs in Honduras. Content for the survey was based on American feedstuff lists, past American surveys, and contacts from Honduras in the development of a comprehensive feedstuff list. Cattle producers and nutritionists that engaged in the survey were affiliated with a current production research project that Texas Tech is conducting. Surveys were administered to the subjects when Texas Tech personnel visited Honduras to collect data for on-going project.

## Results

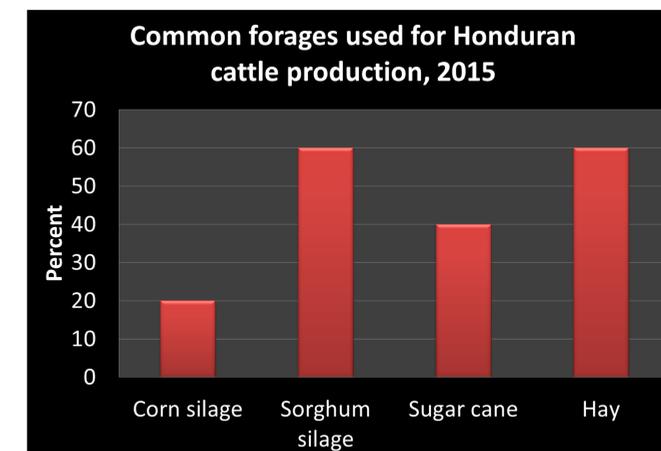
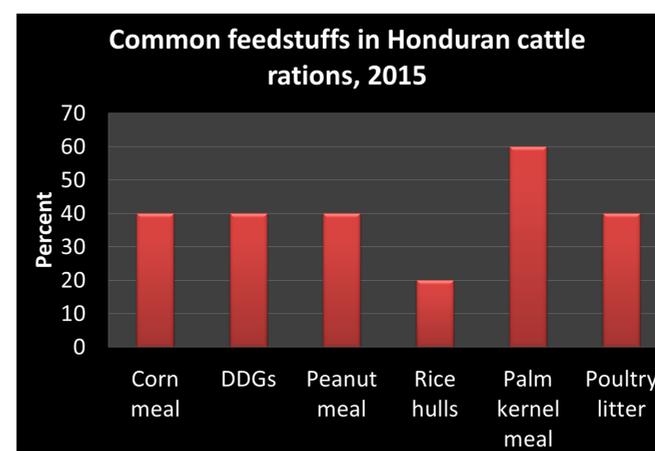
The results did not vary much from expected, regarding the production system used, all producers that responded indicated their production systems involved grazing pasture with supplementation or a semi-confined system. A very important point to emphasize is that all the production systems are based on *Brachiaria* or *Brachiaria* combined with King grass, most likely because the *Brachiaria* grass is well-adapted to tropical climates and not to fertile soils. None of the farmers indicated use of alternative feeds such as vegetables or fruits, possibly because of lack of year-around availability of these feeds, capability to feed, or lack of economic feasibility of these feeds.

## Map of feedstuffs in Honduras



## Feedstuff Prices

Ingredient	\$/ 100 pounds
Corn	15.45
Sorghum	14.32
Palm kernel meal	7.45
Oil	18.18
Fat	20.45
DDG	12.73
Rice hulls	14.45
Meat meal	25.00
Fish meal	36.36
Soybean meal	31.00
Carbonate Ca	3.86
Minerals	31.82
Rye	22.72
Peanut	75.0
Molasses	7.27
Poultry litter	0.23
Wheat meal	34.54
Urea	22.73



## Implications

Information provided in this survey will be critical in helping local producers establish sustainable livestock systems, working toward the establishment of food security in Central American countries.

The information garnered in this survey will be used to develop a library of available feedstuffs for ruminants in Honduras, which does not presently exist.

## References

- Lozano, A. 2011. Caracterización nutricional de algunas materias primas y co-productos en la Formulación de raciones para ganado lechero, Materias primas. (En línea). San Pedro Sula, Hon, SAG/ 6 Mar. 2015. Documento elaborado en la Secretaría de Agricultura y Ganadería de Honduras. Available in <http://pronagro.sag.gob.hn/dmsdocument/271>.
- Neufeld, L; Hernandez Cordero, S; Fernandez Gaxiola, AC. 2006. Desnutrición crónica en Centroamérica e Inventario de Intervenciones Nutricionales: Determinantes de la desnutrición crónica en los países. Cuernavaca, Morelos. Dirección de Epidemiología de la Nutrición Instituto Nacional de Salud Pública. 2ed. 96 p.
- Duran Castro, F; Kebreau, R. 2011. Análisis comparativo nutricional y económico de tres alimentos balanceados para vacas lecheras de alta producción. Tesis Lic. Ing. Agr. Zamorano, Honduras. Escuela Agrícola panamericana El Zamorano. 37p.

