Introduction

In the Philippines, two of most popular small ruminants are goats and sheep. Both are part of farming in the country. Ruminants — the world ruminant comes from the Latin “ruminare,” which means “to chew over again” — are mammals that are able to acquire nutrients from plant-based food by fermenting it in a specialized stomach prior to digestion, principally through bacterial actions.

Advantages of Raising Small Ruminants

- Goats require smaller capital investment than cattle.
- Goats multiply faster than cattle or carabaos. Before a goat is three years old, she can give birth to as many as five kids.
- Although a goat is small, she can produce as much four liters of milk everyday if she is pure-bred and is given a ration to meet all of nutritional requirements.
- Goats require less feeds than cows and carabaos. About ten native goats can be feed on the feedstuffs sufficient for one cow. And about 6-7 purebred dairy goats can be fed on the feedstuff sufficient for one dairy cow.
- Goat are usually docile and can be raised by anyone. Where cows or carabaos may be too large for women or children to handle, the goats is just right size of animals for them to raise.
- Goats are friendly and intelligent.
- Goats are clean animals. They do not thrive in filthy places. Also, they do not eat rotten or spoiled feeds.
- A few can be tethered along farm fences and boundaries or along roads and can be even be confined in pins and given yard clippings and branches or tree and shrubs. A herd can be raised easily on open lands.
- Under orchards and coconut plantation, goats are good clippers of weeds.
- Goats provide manure for fishponds, farms and gardens.
- Farmers, in some cases, can use goats “insurance” against the failure of their crops.
- A family milk goat can provide just the right amount of milk for the farm family at very economic price.

Desirable Characteristics For Small Ruminants

1. Good teeth.
2. Good legs and feet.
3. Good and shiny skin and hair.
4. Normal reproductive parts.

System of Raising Small Ruminants

1. Zero Grazing (Cut and Carry)
2. Grazing System
3. Goat-SALT Integration System (SALT 2)

Nutrients Needed in Small Ruminant’s Feed

1. **Energy.** Most energy required is supplied by carbohydrates and fats found in forage and grain.
2. **Protein.** This nutrient is essential for growth, repair of old tissues, milk production, and development of unborn kids.
3. **Minerals.** These are essential for growth and reproduction. These are mostly calcium and phosphorus, which are found chiefly in the skeleton.
4. **Vitamins.** These are feed nutrients which are needed in a very small quantities but which are essential to life.
5. **Water.** The animal body is 56-70 percent water which helps liquefy the nutrients fermented in the digestive process.

Breeds of Goats

1. Anglo Nubians = 70-90 kgs (and 1-21 liters of milk daily)
2. Boer = 80-90 kgs average
3. Saanen = 60-70 kgs (1.8 liters of milk daily)
4. Toggenburg = 50-60 kgs (1.5 liters of milk daily)
5. Alpine = 50-60 kgs (1.5 liters of milk daily)
6. Philippine Goat or Common Goat = 20-30 kgs (milk is just enough for its kids)
7. Didiangas Goat = 40-50 kgs

Breeds of Sheeps

1. Meat Sheep Breeds (Cheviot, Dorset, Hampshire, montadale, etc.).
2. Long Wool Sheep Breeds (Border Leicester, Coopworth, Cotswold, Lincoln, etc.)
3. Fine Wool Sheep Breeds (American Corno, Booroola Merino, Deboulet, Delaine-Merino, etc.)
4. Dual Purpose Breeds (Miniature Brecknock, Columbia, Corriedale, Panama, etc.)
5. Hair Sheep Breeds (American Blackbelly, Barbados Blackbelly, California Red, Dorper, etc.)
6. Minor Sheep Breeds (Black Welsh Mountain, Blueface Leicester, California Variegated Mutant, Icelandic, etc.)
Classification of Common Feed Ingredients for Ruminants

1. Roughages. These are feeds containing relatively large amounts of fiber or digestible material.
2. Concentrates. These are feeds which have a comparatively high digestibility.
3. Feed Additives. These are chemical compounds that are included in animal rations but do not supply nutrients to the animals.
4. Minerals Supplements. The function of mineral elements in goats is to provide structural support for the body.
5. Vitamins Supplements. The dietary vitamin requirements of ruminants like goats are relatively simple due to the nature of feeds they ordinarily consume.

Some Local Ingredients for Ruminant Feed

1. Corn. This is the most popular brain used for feeds. High in total digestible nutrients, low in fiber, and higher in fat.
4. Sorghum. This is very similar to corn in feed value except that is lower in fat.
5. Copra meal. This is what is left of the coconut meat after the oil has been removed or extracted.
6. Soybean oil meal. This is a by-product after extracting the soybean oil. It contains about 44% crude protein and is also a good source of energy.
7. Mungo. This legume is a human food, it can also be given to goats in place of oil meal.
8. Molasses. This is a practically all carbohydrates with only 3% crude protein.
9. Ipil-ipil. As a leaf meal, it contains 21% crude protein.

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Reference:
• Henrylito D. Tacio. Raising small ruminants for food and profit retrieved October 9, 2017 from http://edgedavao.net/agri-trends/2017/01/18/raising-small-ruminants-food-profit
• Pictures and caricatures from pixabay.com

How to Raise Small Ruminants (Goat and Sheep) for Food and Profit