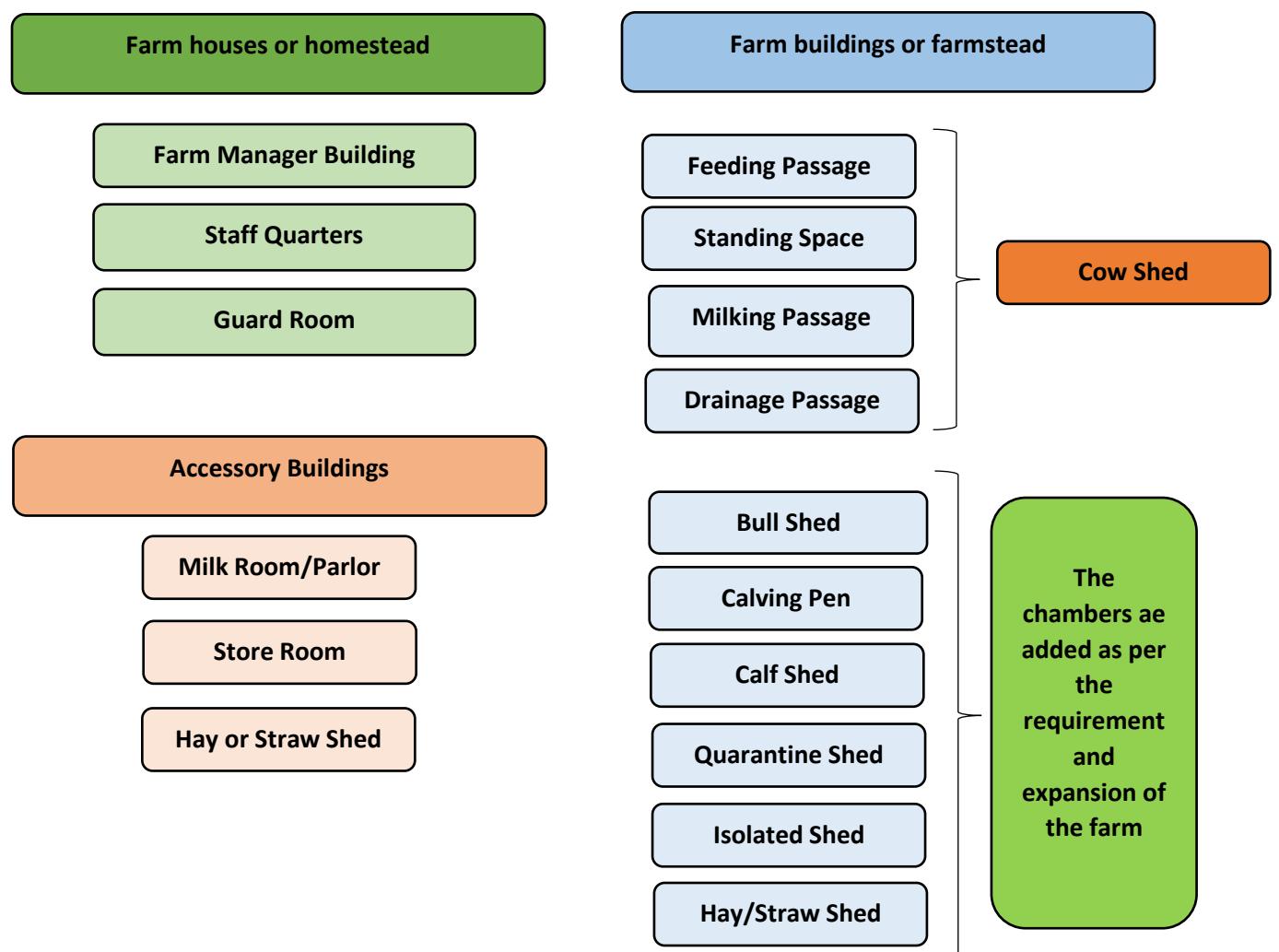


## Establishment of a Dairy Farm

Establishing a dairy farm in Bangladesh requires a proper plan and the plan comes with possessing a spacious property, manpower and most importantly healthy herds. To run the farm successfully, there are some key factors which can secure the business for a long-term goal. The below discussion states the general structure of a dairy farm, the cow shed design, the bio security system and the waste management system of a dairy farm.

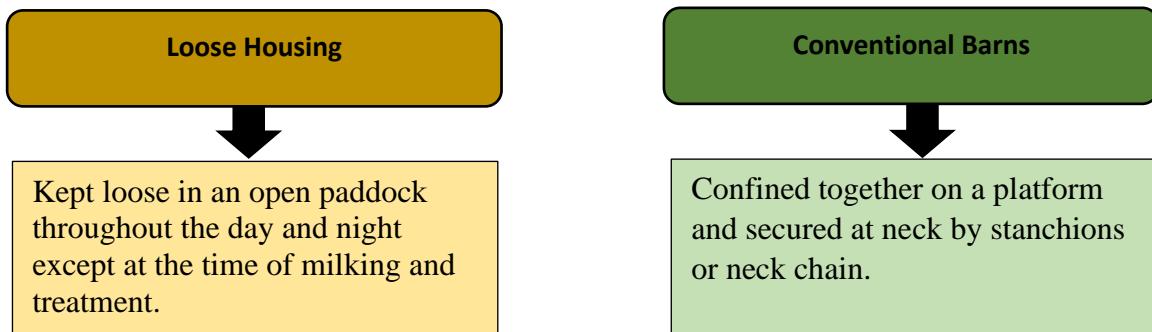
### Structure/Segments of the Farm:

The farm buildings can be grouped into this following category:

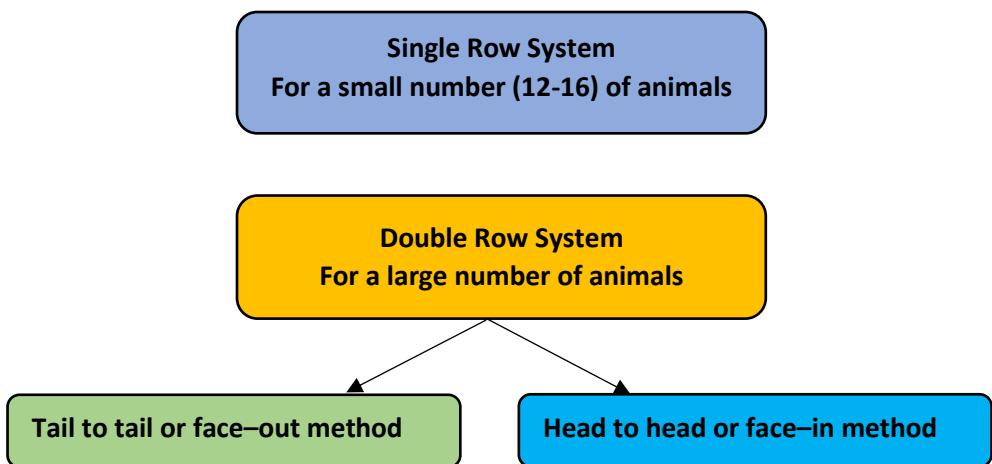


### **Design of Cow Shed:**

There are two systems for housing the cattle-



### **Methods of Keeping the Cows:**



### **Cow Comfort Planning:**

The goal of running a dairy farm will be successful when the herds will be in comfort. There are so many aspects need to be taken care of to keep the cows in comfort zone which results into higher milk production and lower risks of diseases.

The Checkpoints are here-

Ensure good earthing of all metal parts and avoiding sharp edges in the barn

Good bedding system, enough space for standing or lying down

Reduce the chance of hoof injuries and skidresistant flooring system

Food bunk at adjustable heights and enough space for all cows to eat and drink together

3-4 meters of space around the water tank to reduce pushing

The ventilation system should prevent high humidity in winter  
excessive heat in summer

Use lamps, windows or roof plates to ensure sufficient light (150-200L)

Avoid overcrowding of cows to reduce disease risks

### **Bio security of dairy farm:**

Bio security is an essential part to protect the livestock and ensure longevity and also the productivity. There is a continuous process for reducing the disease risks and protectivity.

A well-planned strategic vaccination program

Purchase new herd and feed from reputable and dependable sources

Maintain the hygiene of used equipment and change cloth during visiting the shed

Keep the new animals in the quarantine shed for at least 30 days and test for any infections

Daily monitoring system for signs of any illness or discomfort

Remove dead animals from the farm area and totally dispose

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Maintain fencing and proper spacing in case of various animals in a single farm

Limit people access to the farm and maintain a record of people visiting the farm

Educate and train the farm employee about proper herd management and the health security of the animals

### **Dairy waste management system:**

The common wastes of a dairy farm are manure (animal faeces), milking house waste, feed packages, milk packs, spilled feed etc. The waste can be managed by destroying the waste and another way is to recycle the waste into eco friendly livestock and farm ingredients.

## **Eco friendly waste management:**

### **1. Biogas production:**

Pure biogas stored in cylinders is a marketable product and hence, can be easily used any time anywhere as LPG cylinders. The biogas also can meet up the requirement of local stuff members of the farm through cooking.

### **2. Composting:**

Long-time use of chemical and organic fertilizers significantly affects the quality and productivity of soil. The animal waste can be used as bio fertilizer to minimize the cost of chemical fertilizer and protect the soil quality.

### **3. Vermicomposting:**

The earthworms eat the organic matter and excrete little pelleted material called “vermicompost”. Vermicompost is rich in Nitrogen and Potassium and considered a good source as a fertilizer.

### **4. Fish feed:**

Integration of fish with livestock farming is the best method for recycling of organic wastes.

Innovations in recycling the waste products will minimize the cost as well as increase the productivity of the farm.