There are many breeds of cattle in the world

Many of these breeds have similar biological properties. Some are more popular than others and are used in larger numbers.

The environment in which the cattle are raised in and the market conditions
Are two important factors to determine the most appropriate breed types to use.

In many cases a single breed will be appropriate. This breed should be selected as an all-round performer in many traits.

Crossbreeding within the herd can make better use of breed selection by combining breeds with different strengths to produce a final progeny for sale that the market wants.

These progeny will also have hybrid vigour to lift their performance even more.

All breeds are slightly different, but many are similar in terms of some of the important traits.

For this reason it is often more useful to select the right breed group of cattle for your breeding system and then select the breeds you prefer from within that group.

Table 1 is a list of breed groups. Different breeds are listed in each group; breeds in the same group have similar biological performance.

Table 1. Breed group definitions

Breed group	Breed	Breed group	Breed
BRITISH	Angus, Hereford, Poll Hereford, Shorthorn, Galloway, Murray Grey, Devon	BOS INDICUS	Brahman, Sahiwal
Large British	South Devon	TAURINE / SANGA	Tuli, Senepol
EUROPEAN Dual purpose	Simmental, Gelbvieh, Maine Anjou, Brown Swiss	DAIRY	Holstein, Jersey
Meat – large mature size	Charolais, Romagnola, Chianina	JAPANESE	Black Wagyu, Red Wagyu
Meat – medium mature size	Limousin, Blonde Aquitaine	COMPOSITE Bos indicus composite	Santa Gertrudis, Santa Gertrudis, Braford, Bos indicus composite Brangus, Droughtmaster, Charbray, Belmont Red
Double-muscled	Belgian Blue, Piedmontese		

British breeds are generally earlier maturing and are thus able to fatten on less feed. For this reason they perform well on moderate nutrition. They have high fertility and good eating quality. Some British breeds are used in the industry as highmarbling breeds. British breeds and crosses of British breeds excel in maternal traits and make excellent mothers.

European breeds generally grow faster and have more muscle. They are generally later maturing than British breeds and need more feed to lay down fat cover.

Many successful crossbreeding herds cross European bulls over British breed cows to produce faster growing, higher yielding calves. Some European breeds are also strong in maternal traits and make excellent mothers.

Bos indicus breeds have higher survivability, adaptation to poorer environments and greater parasite resistance.

Breeds used in the dairy industry are high milk producers that can differ in body size and maturity pattern.

Composite breeds can be a combination of two or more breeds. The breeds used to set up the composite will determine the biological type of the animals and how it will perform under different nutritional conditions. There can be as many composite types as breed types, so it is not appropriate to compare one composite with another unless the parent breeds are known or the biological type is considered.

The selection of appropriate breeds to use in a breeding plan is the first step. On average, the most appropriate breed will perform the best. However, breed is not a guarantee of performance, and it is equally important to select the most appropriate sires within each breed to breed future herd females and sale progeny. Using BREED PLAN genetic estimates and combining these with appropriate visual selection will lessen the risk of having poor performers.