Economics of Megadon Ranching

I thought I would work back from the street price of meat. I reckon that going by the cost of living standards on most worlds a kilo of megadon meat is probably about 1 credit (on the base assumption that even the poor are reasonably well off by today's standards). I'd guess that the farmer probably only sees about 30% of the market value after the slaughterhouse, meat processing, transport and retail people have had their cuts.

From http://www.peacefulpastures.com/beefbulk.html it looks like a 1,000lb cow ends up as about 500lbs of meat. Processing is about 20% of the cost of the meat from the farmer.

Looking at sauropods as the basis for megadons these can grow up to 80 tons, although it would take some time for them to get that large, possibly up to 60 years. I'd guess that most of the megadon meat would be from immature animals that were perhaps 4-5 years old and up to around 20 tons in weight. Not all of this animal weight would generate meat, but each animal could easily generate 10 tonnes of meat at 0.3 credits per kilo (300 credits per tonne) for the rancher (approx 3,000 credits per animal). The market value of this meat would be around 10,000 credits per animal.

For most of the four years required to produce the 10 tonnes of meat there is probably little or no input required from ranchers. There are no real predators that affect the big sauropods. There would be an intensive nursery phase where the eggs were hatched and the newly hatched megadons (about the size of a cat) were grown to the point where there were no real dangers from the environment (probably after a year they would be close to the size of an elephant). I'd guess this would be done in a fully enclosed space that could probably see dozens of animals reared simultaneously.

In the final stages of the growth space there will be a need to herd the megadons in to the slaughter area. This is probably co-located with the nursery area since you'd want to keep that pretty secure as well. The easiest/best way to transport the megadons from the ranch to market is probably as large chunks of meat post slaughter.

My reckoning is that to turn a decent profit you'd need to be able to slaughter a megadons per rancher every one or two octants. Or in other words your herd would need to have about 30 megadons (from hatching to slaughter) per employee to be economically viable if all you did was ranching. As I said in practice I think you could probably manage a lot more than this.

The other thing that would be necessary is a lot of land. An animal that will grow to twenty tonnes in four years probably needs to consume 200+ tonnes of plant biomass to get there. (A 500kg beef cow needs 0.12 hectares, so a 20 tonne megadon should need about 40 times that, which works out at about 20 megadons per square kilometre).

The minimum size viable megadon ranch is probably of the order of a square kilometre nursery area for newly hatched megadons with a number of further km square managed areas. Basically you need 1 square kilometre per employee as a minimum, you could probably manage a lot more than that, especially if you were using unmanaged country outside your fenced area for the largest megadons.

The other part which I haven't covered is that you would have at least two types of megadon ranch, probably three[1)]. These might well all be part of the same physical establishment, especially on the

poorer or less economically active planets.

- **Meat farms** hatch eggs and grow them to what is considered the best size for slaughter (probably determined when the rate of growth slows to maximise the amount of meat in the shortest time). The meat farms would have all their megadons the same age (or possibly they would have several 'herds' that had a number of animals the same age depending on the size of the farm.
- **Breeder farms** would have a number of much larger megadons (in the 50-80 tonne range) that laid eggs for supplying to the meat farms. These megadons might live up to 100 years and are unlikely to be eaten at the end of their life.
- **'Grandparent' farms** breed the animals that the breeder farms use, there would be comparatively few of these and they would sell live, but immature, megadons to the breeder farms .

Anyway given that the ranches have lots of megadons and that the individual animals could be worth 3,000 credits each wholesale it looks like a reasonable picking for some rustling, possibly on a semi-industrial scale.

see also Megadon Ranching.

The Universe, background, economics, ranching, megadon

[1)]

this is based on how the poultry industry works