

FIJI ISLANDS



REFERENCES

Divisional Boundaries - Dotted Line
Political Boundaries - Dashed Line

NORTHERN

DIVISION

VANUA LEVU

CPD

FIJI ISLAND COUNTRY PAPER

KORO

EASTERN

DIVISION

WESTERN DIVISION

CENTRAL DIVISION

SOUTH

PACIFIC



INSIT

LIVESTOCK FEED SITUATION IN FIJI

OBJECTIVE



The objective is to improve livestock nutrition for increased levels of meat and milk production in the country.

LIVESTOCK FEED SITUATION IN FIJI



1.0 Problems / Situation to be addressed.

- 1.1 Low Quality Pastures and high weed infestation.
- 1.2 Seasonality in pasture growth \longrightarrow abundance in wet and scarcity in drier months.
- 1.3 Supplementary feeds expensive and not available all the time.
- 1.4 Inadequate Ration formulation knowledge and not available for all types and class of farm animals.

LIVESTOCK FEED SITUATION IN FIJI



2.0 Outcome

- 2.1 As a result, the production is low and it drops especially during periods of shortages of supplementary feeds and in drier months when the feed supply from natural grass is lowest.
- 2.2 The consequence of all this is fluctuations in milk yield and growth rate of animals taking longer time for the animals to reach maturity, thus affecting returns to investment for the farmer. Locally produced meat is generally perceived to be of inferior quality and does not fetch high price in market place.

LIVESTOCK FEED SITUATION IN FIJI



3.0 CURRENT STATUS

- 3.1 The dairy industry is 20% self-sufficient at about 13.0M litres of milk per annum. The combined meat industries are around 55% self sufficient.
- 3.2 Grazing livestock; pigs and poultry have been identified to have the highest scope for development to raise the standard of living in social and economic terms.
- 3.3 Although livestock nutrition was part of livestock development programmes, it was not addressed to develop feed technologies to impact production in a major way. Hence nutrition still remains the single most important factor limiting livestock production in Fiji.
- 3.4 Total pasture land in the country is 170,00 hectares of which 34,000 hectares are under semi-improved natural pastures and 8 – 10,000 hectares improved pasture with exotic species.
- 3.5 Also 300,000 hectares of extensive natural grassland, about 19,000 hectares under coconut and a large area under pine plantation.
- 3.6 In Fiji there are also a number of agro-industrial by-products such as wheat and rice bran, coconut meal, brewers grain, molasses, bagasse, sugar cane tops, meat and bone meal, fish meal and animal tallow which can be successfully used as ingredients to produce supplementary feeds for livestock.

FEED INGREDIENT AVAILABLE LOCALLY

FEED INGREDIENT	QUANTITY (TONS/YR)	PRICE (US\$)
Mill Mix	806,000	10/35kg
Rice Bran	4,433	5/25kg
Broken Rice	880	5/25kg
Brewers Grain	2,600	18/40kg
Cane Top	300,000	50/100kgbail
Molasses	100,000	30/200L
Coconut Meal	5,000	7 – 14/25kg
Meat & Bone Meal	385	30/50kg
Tallow	2,389	50/100L



LIVESTOCK FEED SITUATION IN FIJI



4.0 QUANTIFICATION OF BENEFITS

	With Feed Technology Program	Without Feed Technology Program
4.1 Stocking Rate		
Beef	2.0 Steers / ha	0.5 Steer / ha
Sheep	5.0 Ewe / ha	3.0 Ewe / ha
Goat	5.0 Doe / ha	3.0 Doe / ha
4.2 Live weight gain		
Beef	500 – 800g/an/day	150-200g/an/day
Sheep	140 – 170g/an/day	50 – 80g/an/day
Goat	80 – 140g/an/day	45 – 50g/an/day
Calves	500 – 800g/an/day	300 – 360g/an/day
Pigs	400 – 450g/an/day	20 – 30g/an/day
4.3 Milk Production		
Dairy Cows	10 – 12 litres/cow/day	3-7 litres/cow/day

N.B Higher production for beef, sheep and dairy production possible through concentrate feed supplement.

LIVESTOCK FEED SITUATION IN FIJI

5.0 STRATEGIES

- 5.1 Formulate and process different rations using locally available agro-industrial by-products.
- 5.2 Established a prototype feed mill .
- 5.3 Introduce, screen and evaluate improved varieties of grass, legume, fodder tree legume and special “speed feed”.
- 5.4 Establish pasture using selected species and develop management practices..
- 5.5 Develop feed conservation practices such as silage making.
- 5.6 **Recruit a Biometrician to educate staff in feed formulation.**

