

- This is about one of the Psyllid (*Heteropsylla cubana*) resistance *leucaena* introduced to

Amarasi cattle fattening system, started in 2003 collaborated with a former Sub-District Animal Health Inspector (Mr. Kula). This has initiated a model of cattle fattening based on *Leucaena* diet which was able to provide fresh forage all year-round in this dry land and dry climate agro-ecosystem having 8-9 month dry period in a year. To provide sufficient bulk feed, the farmer uses rice straw collected from his paddy field (as fibre source in the diet), while *Leucaena leucocephala* cv.

Tarramba is used as the source of high protein fresh forage, and "putak" or palm pith (

*Corypha gebanga*

) is used as the energy source (there are many feeding trials results conducted by BPTP NTT using the palm pith). The cost for harvesting the palm pith was about Rp. 25.000 per tree, which is sufficient to feed 5-6 cattle for approximately one week. Some times the farmer also feed cassava tuber to his cattle (when harvested) as the source of energy. The use of cassava tubers as feed for the cattle was reckoned as more beneficial than if the farmer has to sell the tuber fresh to the local market. In this model, in one year, the farmer would be able to sell 5 to 6 head of fattened cattle with total revenue of 50 to 60 million rupiahs.

- Initiated with 1 ha of Tarramba plot (with about 6,000 plants) in 2003, the area was expanded by the cooperated farmer to about 4 ha now, and he is keeping on expanding the planting area, realising the

benefit of the model. The results of the model have satisfied the farmer needs where provision of fresh forage is not a problem now as in the past, when the farmer have to collect forage from a far which cost him a lot for purchasing and for the transportation.

- Beside the benefit from obtaining sufficient high quality fresh forage, the farmer also earns additional income from the model by selling Tarramba seed, which he sells for 50.000 rupiahs a kg, and the component of seed production has been adopted and replicated by the Livestock Service into other places, i.e. Oebola and Silu in Fatuleu Sub-District, Kupang District. The spread of the Tarramba seed keeps on developing, either within and outside Amarasi area even to the island of Sumba and Flores by

the Livestock Service and some NGOs. Oebola farmers group is planning to develop the model of *Leucaena leucecephala* Fodder Bank in their location with the planting of 20 ha of Tarramba.

- By cut and carry and pruning management, the model can provide high quality fresh forage year round, even during the peak of the dry period when no food crops and grasses may be produced in this piece of dry land with no water supply at all. Thus

Tarramba can still provide income to the farmer all year round in the form of daily liveweight gain given by the cattle under the system.

- Further works, however, need to be done to replicate the model throughout the province to enhance cattle productivity in the region, coupled with the needs to investigate why the adoption

of using *Leucaena leucocephala* as the main high quality forage spreads quite slowly throughout the region. This case is under consideration for research works through collaboration of ACIAR, BPTP NTT and The University of Queensland (proposed for 2010 research program).

- The model of *Leucaena leucocephala* fodder bank described above is suitable and have a great potential to be developed for year round high quality feed provision for a high productivity cattle husbandry (breeding and fattening) in the dry land and dry climate

agroecological zone to support the local government livestock program aimed at regaining NTT Province as one of the main cattle producing area in Indonesia and to support the National program for beef self sufficient program.