

## **Several mangoes in one stone – Prosopis pod flour as the cattle feed**

### **Background**

*Prosopis juliflora* commonly known as Mesquite tree, is a predominant waste land weed tree found abundantly in dry lands of Thoothukudi district coastal area. This tree is considered as a menace by the common peasants whereas it is a multipurpose utility tree for the charcoal producers, livestock growers and poor house hold women who uses it for the production of charcoal, fire wood utilize pod as feed to livestock. People of this region become masters in utilizing this tree for the production of charcoal and for fuel wood. Majority of land less poor and marginal dry land farmers depend on charcoal production occupation during the off seasons. Not only for the employment but useful for the livestock also during the dry off seasons. The livestock especially the goat, sheep and cow feed on the pods during the dry summer months when no other feed is available. Though the fallen pods are directly eaten by the livestock during grazing, still a large quantum of the pod are remained un eaten and left to decay in situ..

### **Rational**

These unutilized pods if properly collected and processed can be stored for several months and used as livestock and poultry feed as a cheap alternative for the costliest grains and bran like pearl millet and wheat bran. Besides milling the pods into fine flour results in crushing of seeds and there by effectively prevents the further spread into the cultivable land through livestock manure.

### **Intervention Process**

Considering this situation ICAR KVK (Hosted by SCAD) had a dialogue with the people of this region and started promoting the use of ground pods as livestock feed from the year 2010-11. To start with the elder people who cannot do any hard labour were motivated to collect the pods at the cost of Rs.3/Kg and the same were then taken to the KVK where the pods were then dried for 10-15 days to reduce the moisture level and then again shifted to the grinding mill for grinding the same. The grinding mill is situated in Thoothukudi which is 75km away from Vilathikulam area. With this background a meeting was conducted by calling on the potential entrepreneurs at Vilathikulam and they were trained on the Prosopis pod flour as animal feed.

### **Intervention Technology**

The ground pod flour was then given to the livestock growers especially Cattle owners for trial purpose. After getting their encouraging positive feedback it was decided to promote an enterprising mill at Vilathikulam itself by collaborating the pod collectors, entrepreneurs, livestock owners and

traders. With the help of motivated entrepreneurs and pod collectors about 8 tonnes of pod were procured and one grinding mill was established at Vilathikulam itself during the month of September 2014. Mr. Sundarraaj came forward to establish the mill with his capital investment and technical guidance of KVK, Tuticorin. There were a great struggle in fabricating the machine and finally with the intensive expertise of kvk it was portable to come with the suitable machine. The Professor from TANVAS wondered on this initiative and finally the unit was inaugurated by the renowned professor and Dean of Veterinary College and Research Institute Dr. S. Pradhaban in a grand function held at the mill premises.



*(Dr. S. Pradhaban, Dean, Veterinary College and Research Institute, Tirunelveli visiting the mill on its inaugural function)*

Within a month all the ground flour of 8 tonnes was sold out by collaborating with traders and cattle owners which shows the opportunity existing in promoting this enterprise.

### **Impact – Employment generation**

The pod was collected during the month of April and May by the landless laborers and elderly people. During this time each one of them were able to collect on an average 30Kg of pods within 2-3 hours of work. For this they got Rs.150 (Rs 5 / Kg of seed collected) as wages. They preferred to go for pod collection instead of minimum guaranteed work scheme run by the government where in they get 150 days of work per family per annum. By starting this venture it created an additional employment of 40 – 60 days for these pod collectors in a year. Besides during the processing it provided additional employment opportunities for the mills workers for about 240 men days.

To put together this venture resulted in creation of 240 men days of work at mill and 267 men days of work for the pod collectors during this year 2014 just by collection and processing of 8 tonnes of pods.

We expect that in the coming year we can procure about 50 tonnes of pod and create an additional employment opportunity of 3166 men days of work to the people of this region.

**Impact – Income generation**

By feeding on Prosopis pod flour as a cheap replacement for pearl millet / wheat bran the livestock owners could save up to Rs.5/Kg (cost of the pod flour in Rs.16 where as the cost of wheat bran / pearl millet in Rs.21/kg) thus add up the profit margin for the livestock farmers. The entire process becomes possible because of the base work done by the SCAD Rural development wing at the ground level by mobilizing the community support base through SHGs and volunteers.

By this way of making Prosopis pod flour give multiple benefits – several mangos in the stone.

1. Reduction of spread of Prosopis by open grazing by goats.
2. The Protein nourishment of cattle is ensured.
3. Ensures the availability of low cost feed – a boon to cattle owners.
4. Rural entrepreneurship generates income and employment to the rural poor.