

## Padi Pantalu

### Integrated Fodder Development Plot

Kurabalakota and Valmikipuram are the two mandals of Chittoor district in Andhra Pradesh where the livelihood of farmers predominantly depends on milch animals. Residents of the villagers mostly rely on local pastures and purchased straw to feed their livestock. The fodder requirements of the farmers are met by grazing animals on common lands, fallow agriculture fields, or harvested agricultural land during rainy season. Of late there is a reduction in grazing land due to changes in the climate and subsequently changes in the cropping pattern. Hence, majority of the farmers rely upon concentrate feed in the form of feed pellets, which lead to reduction in the quality output from the livestock. Heavy consumption of concentrated feeds affecting the animal health and increasing the cost of milk production, thus making rearing of milch animals not remunerative.

Creating a sustainable natural resource base for supply of fodder can address the issue of feeding concentrated feeds. APMAS in coordination with its donor partner, AEIN Luxemburg has initiated a project “Padi Pantalu” in these two mandals to promote food and fodder security and support welfare of livestock as its one of the core objectives of the project. The project aims to increase the availability of fodder and land for fodder cultivation in 30 villages of 10 Gram Panchayaths from both the mandals to achieve food and fodder security.

The idea of integrated fodder development plot is developed to promote balanced nutrition for livestock. Seven fodder species are grown in one acre land each. All these species were selected as they are rich in providing proteins and can be harvested multiple times. Also they helps to produce seeds for next harvest/season. The selected land was divided into 5 parts, where perennial grass “Super Napier” was cultivated in about 0.25 acre, “Lucern” a fodder legume in



0.20 acre, “Sweet Potato” vine variety of fodder in 0.10 acre and “Mulberry” in 0.25 acre and “Hedge Lucern” a legume fodder species in remaining 0.20 acres; while “Sesbania and Glyricidia” tree fodder varieties were cultivated as border crops grown on the field bunds to meet fodder requirements of small ruminants. These fodder varieties altogether forms a healthy diet for the cattle and small ruminants for supplying of proteins, fiber, carbohydrates and vitamins in adequate ratios. Thus, in turn make cows give birth to healthy calves every year.

The seed material was procured from different sources like Silk board of India, Local farmers and regional KVKs. Along with seed material the farmers were supported with Rs.8000 each for their tremendous irrigation and manures.

Out of 14 livestock entrepreneurs, 10 farmers were provided with multipurpose chaff cutter for chaffing grass for silage preparation as well as for flour making which is used to mix in the daily feed of cattle; The remaining 4 farmers were provided with normal chaff cutter to cut the grass and make silage, which can be used for summer season (off season).



#### Fodder types and protein contents:

Fodder species	Protein content (%)	Yield (tones)	No. of harvests (times)
Super Napier	10 to 12	50	5
Mulberry	15	30	6
Hedge Lucern	20 to 22	10	6
Lucern	16 to 25	5	6
Sweet potato	15 to 30	3	6
Sesbania (Avisa)	30	5	5
Glyricidia	25 to 20	3 to 4	6

Feeding each cow with 12 kgs of silage mixed with fresh grass, help the livestock farmer reduce the dependence on concentrate feed by 100%, while decreasing the costs by 60%. This also increased the milk yield by 20% and with improved milk quality (SNF fat) by 10% resulting in generation of more incomes.



**Swetha** from Harijanawaada village, Tettu panchayaths, Kurabalakota Mandal says “I have invested a lot of amount on tomato cultivation but due to low productivity, low market price I was into debts. So I purchased three cows by taking loan from local bank but was unaware of feeding schedules. I showed interested for fodder development and silage making, so I received the seed material of 7 species, a multipurpose chaff cutter and silage making drum. Sowing of seed

was done in November 2020, waiting for the first harvest of Napier to feed my cows with fresh fodder and I am expecting profits this year.”

**Revanth** from Danduvaripalle village, Valmikipuram says “I have 8 cows. Earlier I used to take them out for grazing and during the summer season I faced challenges in feeding them. So we used to purchase dry grass from nearby districts at high prices and spent huge amounts on transportation. But with available land in my farm, I am now able take different types of fresh grass everyday to feed my cows.



**Savitamma** from Chinnagangavaripalle village, Ayyavaripalle panchayath, Valmikipuram mandal “I am happy to be a fodder entrepreneur. With the received chaff cutter I will make feed using maize, jowar mixtures and supply to the fellow farmers. Once the first fodder crop cycle is finished, I will provide the seed material to neighbor farmers at nominal prices and will encourage them to use green fodder silage instead of feed concentrates to feed their cattle. This has created an alternate livelihood and generating

additional income to my family. As a woman I am proud to say that I am an entrepreneur now and will continue this as a business until the whole mandal and neighboring areas becomes surplus with fodder.”

