



Seed Balls for regenerating Commons

Kurabalakota and Valmikipuram are two mandals of Chittoor district in Andhra Pradesh. Natural resources in these mandals are poor and deteriorated due to series of droughts. The dry agro climatic

zones of Andhra Pradesh were deficient in total dry matter availability of feeds to meet the requirements of livestock. Furthermore, there was a severe shortage of green forages to meet the requirements of small ruminants.

Even though the region was marginally self-sufficient in terms of dry forage availability, the majority of these forages were nutritionally poor cereal straws. Hence, suitable strategies should be developed for the efficient utilization of existing feed and fodder resources to improve animal productivity in region.

Common Property Resources which are important source of fodder for Small ruminants were depleted over the years due to series of droughts, mining, encroachments etc. As the commons were depleted rearers of small ruminates are facing serious problems in fetching fodder for small ruminants. Shepherds usually migrate to long distance in search of fodder for their flock.



To eliminate the constrains of low fodder availability, and regenerate the common property lands, hilly terrains, fallow lands APMAS promoted sowing of fodder trees through "Seed Balls" in the both the mandals.



Seed ball is a mixture of seeds wrapped with a mixture of clay and compost. The compost helps protect the seed from predators such as insects and extremes of temperature until the rains arrive. Once soaked, the seed ball will help retain and prolong a moist environment around the seed to encourage germination. Essentially, the seed is 'pre-planted' and can be sown by depositing the seed ball anywhere suitable, keeping the seed safely until the proper germination arises. Seed balls are an easy way to grow trees with a longer germination time span. Seed balls are inexpensive and can be easily dispersed over large areas which are often hard to reach. Direct seeding reduces shock of transplanting saplings and helps the young trees grow stronger roots and hence stronger trees.





The main purpose of these seed balls is to provide quality fodder to the dairy cattle as well as to protect the environment, prevent pollution.

Procedure of seed balls:

- 1. Mix equal proportions of red clay soil, black soil and compost
- 2. Mix in 1 to 2 parts water slowly until you get thick, dough-like consistency
- 3. Break a small piece off and put the seed you have chosen at the center (maximum of 10 seeds). Once the seeds are placed, roll the portion of dough between your hands into a marble-sized seed ball. Repeat with the rest of the soil
- 4. Let them dry for 24-48 hours until they are fully dry before throwing them in open lands



Preparation of seed balls commenced in the villages from 1st July 2020 and continued laying these balls for them on 5th July 2020. These one lakh seed balls were made by the project team in just five days with the help of farmer associations, in collaboration with the villagers and school children.

The fodder seeds were collected from the Forest department, Krishi Vigyan Kendra and local farmers in the preparation of seed balls.

Around 10 seed varieties such as Glyricidia, Tamarind, Custard apple, Peepal, Neem, Amla, Sesbania, Babul, Gulmohar, Dandelion and others were used for seed balls in consultation with Forest Department as they chose to regenerate common property areas, forests that could withstand water stress.

Seed balls were made by women farmers and board members from two farmers' associations. Fifty thousand seed balls were prepared for each mandal in the district. Around 70 percent growth success germination rate is observed on the current rainfall.





Regional Government Women's College professor Dr. Uma Amareshwari garu explained the importance of growing plants





while Mr. Bodishavali, a social worker, explained the process of making seed balls and offered his support.

Lavanya from Valmikipuram mandal says, "When we were children, the streets here had so many trees. But many have been cut down for roads and change in climate reduced rains affecting the live forests. APMAS has started a seed ball program under fodder development and reforestation. Children like nature and they want to do their best to protect it. My daughter Pooja also participated in the program Schoolchildren and other local villagers have been roped in to make nearly 50,000 seed balls of different fruits, flower flowers and vegetables, which will be dispersed in and around the 5 villages.



Jayaramreddy from kurabalakota mandal says, "This is an easy way of afforestation. You don't need to dig pits. Children have a cool weapon to fight desertification of the area and to save the environment with seed balls. For the past few summers, me and my wife Reddemma have been taking children residing in their colony on nature walks and teaching them the importance of green cover and making them to plant one sapling every year. Now they have participated in preparation of 50,000 seed balls actively. They also participated in dispersing the balls in the open spaces. Many

children observe to see if their seeds have started growing. It is also a great lesson in responsibility".

