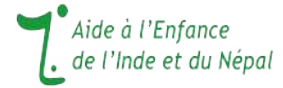




Climate Smart Village Kitchen Gardening



Background

Nallamada and Gudibanda are the two mandals of Anantapur district in Andhra Pradesh. It has a semi-arid type of climate, with hot and dry conditions for most of the year. In both the mandals, most of the rural poor rely for their livelihood and food security on highly climate sensitive rain-fed agriculture and small-scale farming. The district is one of the most vulnerable areas in the country to climate change and variability, a situation that is aggravated by the interaction of multiple stresses, such as changes in temperature, seasonal variation of rainfall, precipitation (both amount and variability) and increased frequency of droughts occurring at various levels. The prevailing drought condition has increased the burden on economic and food security among farming families and resulted in negative impact on the livelihood of majority of smallholder farmers depending on rain-fed agriculture.

Climate Smart Village

As climate change is already impacting the environment and the farming communities, more extensive adaptation and mitigations measures are necessary to reduce vulnerability to future climate change. APMAS, with its experience in working on the natural resources management and livelihoods of rural communities, conceptualized a project '**Climate Smart Village (CSV)**'. This project is for a period of three years from 2019 to 2022 and being implemented with the support of AEIN, Luxemburg. The project aims to promote affordable and replicable adaptation and mitigation practices to enhance livelihoods of vulnerable communities in ten villages in five-gram panchayats of Nallamada and Gudibandla mandals, Ananthapur district with 5 important components such as '**Climate Smart Agriculture**' '**Climate Smart Energy**' '**Climate Smart Institutions**' '**Climate Smart Nutrition**' and '**Climate Smart Knowledge**'.

Kitchen Garden

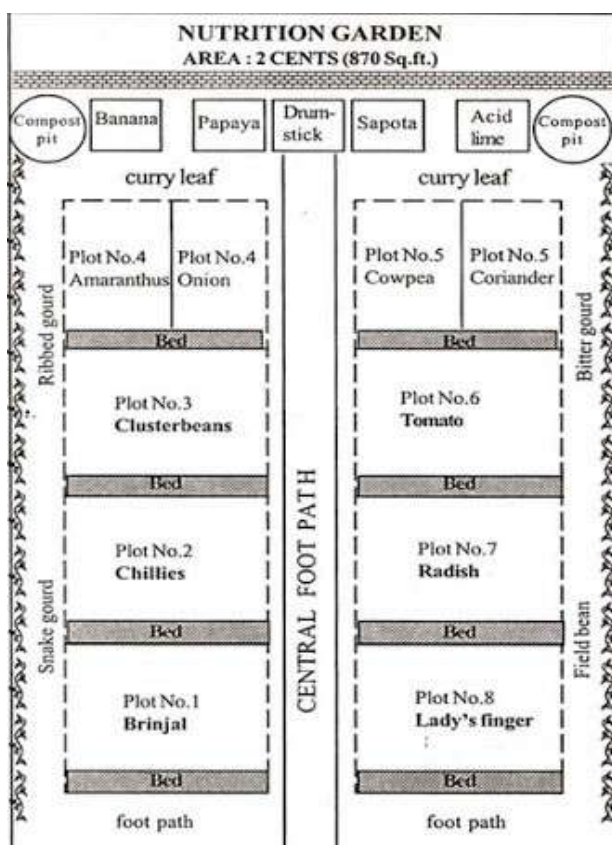
One of the mitigation measures under "**Climate Smart Nutrition**" component is to promote kitchen gardens for improving the nutritional status of the families. As a coping strategy to climate change and variability, kitchen garden may constitute a prime source for providing variety of nutritious vegetables throughout the year, besides reduced dependence on the market and earning considerable income for the poorest families



Sowing of seeds in kitchen garden

Interventions

In 2019, about 225 kitchen gardens were promoted in the operational areas of the CSV project. The key intervention was distributing traditional seeds through Farmer Producer Organizations and providing necessary support in promotion of kitchen gardens in the backyards or in the farming fields. The kit consists of 13 varieties of seeds (Brinjal, Okra, Cluster bean, Palak, Amaranthus, Fenugreek, Coriander, Onion, Radish, Ridge gourd, Dolichos bean, Bitter gourd and Drumstick) each costing Rs.100/-. The seeds are selected considering the prevailing food habits, nutritional values and climatic conditions of the region. Before the seeds were distributed to the HHs, training on sowing, weeding, irrigation, maintenance and harvesting was given by the project team. Along with this hands-on training was given on balanced nutritional diet, importance of intake of fresh vegetables and fruits in their daily meals through regular field visits and timely advisory services. The picture below gives the design of the kitchen garden promoted in the project.



Mulching of the nursery plots



Germination of seeds



Vegetables in the plot

Sidda Gangamma from Konkallu says, “Vegetables grown in my garden were utilized in recipes for home consumption; variety of vegetables added to the family nutrition substantially; shared the surplus with the neighborhood and reduced dependency on the market and thus saving of money and time!”



Coriander and Radish ready to harvest

Uma Devi from Konkallu village says, “Apart from an increase in income, the kitchen garden also helped me to ensure food security and improve the nutritional status of my family. Regular intake of nutrient rich vegetables like Okra, and Drumstick increased the energy levels and efficiency in work.”

Subhashini from Tholetivaripalli village says, “Vegetables like Onion, Okra, Bitter-gourd etc grew in abundance in my backyard garden. I sold the surplus in the local market and earned Rs 6000 to meet my household expenses.”

Food security continues to be a matter of grave concern for India and in a district such as Ananthapur. This situation gets compounded due to climate change and hence there is a dire need to look at multiple strategies to combat the issue of food security. Establishing a kitchen garden is far simpler as rural families are mostly involved in agriculture and a micro-solution and an affordable way of ensuring healthy food and will result in the following:

- Enhances dietary diversity by providing micronutrients through constant supply of fruits and vegetables sufficient to meet the family’s requirements
- Sustainable model for providing food security and diversity to combat malnutrition at the household or community level
- Reduced expenses on vegetables, improved intake of fresh fruits and vegetables, and income generation by sale of the surplus produce
- Tremendous potential to reduce the malnutrition in children and women
- Results in increased participation by women and an improvement in their economic conditions with the sale of excess produce
- Promotes a healthier, more prosperous and sustainable life for women
- Promotes traditional and nutritional rich vegetables and fruits and thus preservation of traditional and variety of seeds

CSV project aims to promote kitchen gardens focusing on:

- Capacity-building on kitchen gardens as part of training curriculum of FPOs & VOs
- Celebration of nutrition day and food festivals to raise awareness on nutrition gardens and demonstrate how the food can be prepared without losing the nutritional values
- Promotion of kitchen gardens by households, anganwadis, and schools to improve food security by contributing significantly to dietary diversity
- Increased participation of the women and the family members in the activity
- Promotion of traditional varieties of vegetable seeds