

## **SUCCESS STORY OF A SUSTAINABLE MAIZE BASED CROPPING SYSTEM**

By: Smt Banylla Kharbamon SMS (Horticulture)

### **INTRODUCTION**

In the NICRA village Umjalasiaw, which is a rainfed area, paddy and maize are the most important crop of the region. Most of the cropping systems followed are based on the traditional systems of subsistence farming. The cropping intensity is very low due to only one crop cultivated in a year. The practices so followed, thus, lead to poor yield per unit area. The cropping intensity is very low due to only one crop cultivated in a year. There is a need to increase the yield per unit area, through increasing the cropping intensity by adjusting a new short duration crop in between the main crop and following with another crop. Maize based cropping system helps in improvement of soil structure and organic matter content. It leads to reduction of nitrogen input when rotated with leguminous crops.

### **KVK intervention**

To increase the cropping intensity, KVK Jaintia hills started demonstrations on Maize based cropping systems by intercropping of maize with French bean in kharif season followed by cabbage intercropped with pea in rabi season in the same plot increasing the cropping intensity. The technology is demonstrated in 3farmers plot.

### **Output and Outcome**

Smt Sarmon Suting, one of the hardworking farmers of the NICRA village Umjalasiaw, followed the maize based cropping system in an area of 0.5ha and could get a bumper harvest of maize, French bean, cabbage and pea. From an area of 0.5ha she could get a yield of maize-12.65q; frenchbean- 21.6q; cabbage- 60.5q; Pea- 22.6q as compared to a yield of only 9.7q from a sole crop of maize. The net return from the maize intercropping with French bean is Rs. 49500 with B:C ratio of 2.37:1 and from cabbage intercropped with pea net return was 155250 with B:C ratio of 3.56:1 compared to a very low net return of Rs. 11500 and B:C ratio of 1.3:1 from a sole crop of maize.

### **Impact**

This technology proved to be a very beneficial, profitable and sustainable cropping system. It also reduces the risk of market loss as a result of crop failure. This technology was demonstrated in the year 2016-17 in 3 farmers' field and it brought higher yield per unit area, higher income from a unit area, intensification and diversification of crops, lowers the requirement of nitrogen in the soil and improved the livelihood of farmers. After the seeing the feasibility of this technology, the area has been increased to nearby farmers fields and 10 more farmers have adopted this technology in the fields.



Image: Maize intercropped with French bean



Image: Cabbage intercropped with pea