

## “Eggs in two baskets proves wise”

- Case study of a rainfed farmer diversifying the crops.  
(Mr. Lakshminarayana, Hanimireddipalli Village)

Mr. K.Lakshminarayana is a poor dry-land farmer from Hanimireddipalli village of Kalyanadurg mandal. His family consists of himself his wife and 3 kids, of whom 2 are attending primary school and one is still a toddler. The family has 5 acres of dry land, where he and his wife Anjinamma toil relentlessly to maintain their family. They also work as Agriculture laborers, when there is no work in their own land. They have been growing mono crop of groundnut in their 5 acres of dry land continuously for many years like other farmers in their village. They were investing a lot of money on seed and chemical fertilizers and pesticides for groundnut crop. The crop yields were good initially, but as years passed by the yields started decreasing gradually, as the land productivity started going down because of mono-cropping(?). The soil got degraded and infestation of pests and diseases increased due to continuous mono cropping of groundnut. Added frequent droughts the family income from land went down drastically. The family was forced to borrow loans for crop investments, got entrapped in the vicious circle of indebtedness and suffered a lot for many years.



“We are very happy that we raised two crops this year. We don’t want to depend totally on groundnut because it fails often. Even our neighboring farmers want to grow two crops from next year”.

- Mr. Lakshminarayana

During 2007-08, AF started its sustainable agriculture program in Hanimireddipalli village and conducted a series of awareness campaigns and meetings to motivate the farmers to adopt sustainable agriculture practices. They emphasized on the need for crop diversification in order to spread the risk of crop-failure and enhance the soil productivity. At this juncture Mr. Lakshminarayana and his family met AF-EC staff and discussed about their problems of low yields. When the situation was analyzed it was found that depending on mono cropping was the main reason for their distress. So they decided to change the cropping pattern and follow crop rotation in half of their land. Accordingly during the present kharif season (July 2008) they sowed Red gram (pigeon pea) in 2.50 acres and groundnut in the remaining 2.50 acres of land.

They followed the other sustainable agriculture practices like summer ploughing, installation of pheromone traps and yellow boards, application of bio-fertilizers,

spraying of bio-pesticides etc. for both the crops. The results are shown in the form of statistics as under:

#### A - The investment

Particulars	Red gram (2.5 acres)	Groundnut (2.5 acres)
1. Seed cost	400.00	2100.00
2. Preparatory cultivation	750.00	750.00
3. Fertilizers and Pesticides	1000.00	1750.00
4. Weeding + Inter-cultivation	1250.00	2500.00
5. Harvesting (expected expenditure)	600.00	1500.00
<b>TOTAL</b>	<b>4,000.00</b>	<b>8,600.00</b>

#### B - The yields and gross incomes

Red Gram Yield		Groundnut Yield	
Particulars	Amount	Particulars	Amount
500 Kgs of Red gram @ Rs. 22/- Kg	11000.00	250 Kgs of Groundnut @ Rs. 28/- Kg	7000.00
Fodder	700.00	Fodder	2000.00
<b>TOTAL</b>	<b>11,700.00</b>		<b>9,000.00</b>

#### Net returns in Groundnut

Income	- Rs.9000
Expenditure	- Rs.8600
<b>Net returns</b>	<b>- Rs. 400</b>

#### Net returns in Redgram

Income	- Rs.11700
Expenditure	- Rs. 4000
<b>Net returns</b>	<b>- Rs. 7700</b>

This year the groundnut crop failed and yields were very low.

As seen from the above, the net return on investment from groundnut crop this year is a meager Rs. 400/- (Rs.160 per acre), whereas for Red gram crop it is Rs. 7700/- (Rs.3080 per acre). The poor farmer family is very happy because in spite of the groundnut crop failing, (when most of their fellow farmer families have incurred losses) Mr.Lakshminarayana's family is able to earn Rs.8100 from their land, which can be very useful in these hard times.

If they had to go in for groundnut mono crop, they would have had a net return of Rs.800/- only.

Mr. Lakshminarayana and his family expressed their opinion that it is wiser to spread the risk between two crops rather than resorting to gambling with one crop. They have decided to raise at least one more crop, other than groundnut every year, so that (a) they can have some assured income from the land even during the droughts, (b) their land fertility will increase because of crop rotation and (c) the pest and disease attack will decrease.