A Success Story of an AP Farmer

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In India, out of 141mha net cropped area, 85 mha are rainfed (60 %). In AP, out of 10.7mha net cropped area, 6.3 mha is rainfed(58%) Nalgonda is one of the important rainfed area dominating district with a normal rainfall of 751mm.. Out of its 538 thousands ha net cropped area, 295 thousands ha are rainfed(53%). Iduluru is a village in Nalgonda district where farmers suffer from the crop failure because of weather aberration. Mr Narayan Reddy of this village, however, created a history in farm production through the adoption of farming system approach. This article makes an attempt to highlights the secrets of his success.

Weather aberration is still a rule in India rather than an exception. This year weather during Kharif bears the testimony of this statement. Weak monsoon resulted in abnormal rainfall at the beginning while unprecedented flood in Karnataka and AP caused havoc at last leg of the season. Flood took away the lives of hundreds of human beings, livestocks and completely ruined a large numbers of villages. Bidar, Raichur, Gulbarga, Gadag, Bellary and Bagalkote districts of north Karnataka have been affected by the flood The flood affected districts of AP are Kurnool, Guntur, Krishna and Mahabubnagar. We were the helpless spectators of the dance of nature in the form of the drought and floods on the same platform

There has been enormous progress in the development of irrigation facilities in the country but still the lion's share of the our cultivated land of the country is under rainfed (60%). The socio-economic conditions of the rainfed farmers are miserable. Interestingly there are some bright spots like Ralegaon Siddihi and Hivare Bazar in Maharashtra and some other states which have created by great souls like Hazare, Popat Rao Pawar and others (6). Success stories of some individual farmers are also available from rainfed areas. The success story of such a farmer finds a place hereunder.

Location

Iduluru village located in Nalgonda district is famous rainfed area where drought, crop failure etc are common occurrence. Poverty is the permanent companion of the farmers. Rainfed rocky soils, underfed cattle, poor farm family are the natural scenes of the area (5) Some important statistics of the district are mentioned in **Table 1** (3,7)

Mr Narayana Reddy braved to make a fortune in such situation through adoption of scientific methods of farming.

Actions Taken

Three years back, Mr Reddy purchased some land from four farmers to form the present consolidated farm under discussion. Necessary soil and water conservation measures were taken to prevent run off. And as a result of those measures the water table of the farm was coming up. Earlier the area was totally liveless. The present scenario is just opposite. Now greenery is all round. His farm is well fenced. Trees are seen on both the sides of roads. Revamping of the old well was accompanied by the installation of 4 new tube wells to meet the increasing demand of water for farm activities. Mr Reddy lives in a beautiful farm house which is located in pollution free environment(5).

The farm is well equipped with farm equipments like two tractors, harvesters, and threshers. In addition, a water purification unit with a capacity to produce 300 bottles of water per day has been installed in the farm area. The water of the area is polluted with fluorine. His water purification plant has been planned to rectify the fluorine problem.

Presently, Mr Reddy, has about 44.0 ha land. Out of 44ha, farming operation is confined to 38ha, the rest is occupied by farm house, roads, water structures, and other infrastructures. The income generation from the farm amounts to be about Rs 2.77 million (Rs 72895/ha) per annum(5)This kind of income in this area is unheard and unprecedented. The readers would, therefore, be interested in

Table 1 - Some important statistics of District Nalgonda and AP							
Location	Rainfall Normal (mm)	Rice yield (kg/ha)	Cotton yield (kg/ha)	Fertiliser use (Kg/ha)	Irrigation (%)		
Nalgonda state	751 940	3021 2939	260 347	225 184	47 40		
Source : (3,7)							

knowing the secrets of his success.

Secrets of Success

The secrets of his spectacular success is the adoption of integrated farming system approach. It is estimated that by 2012 his annum income would amount to Rs 7.5million against(Rs 1,70,454.0/ha) against the present income of Rs 2.77million when the fruit trees of his orchard would give full potential yields(5) Other features of the farm are:

- **1.** Farm planning was on the basis of micro-watershed principles
- **2.** Efficient use of inputs like land and water
- 3. Science based approach in farm layout
- 4. Land consolidation and proper leveling
- **5.** Provision of regular water supply through tube wells which help in adoption of fertigation through drip.
- **6.** Fishery pond in 2ha, no water crisis for crops and animals
- **7.** Adoption of integrated plant nutrients systems (IPNS) through the use of fertilisers, tank silt, green manure and vermi-compost
- **8.** Cultivation of high water requiring crop like rice in upland was avoided, rice found a place in low land where on other crop was suitable
- **9.** Production was planned keeping in view the market demand

Different components include are horticulture, (40 ha, 80% land), low land rice (4ha), Green fodder(3.2%), Dairy farm with 100 animals (75 buffaloes and 25 cows), poultry farm with 500 birds (5).

Compost are prepared from the cowdung and poultry litters. A vermicompost unit (55ft X50 ft) with 400 tonnes per annum capacity was also installed. Two hundred tonnes are sold at a price of Rs 3000/tonnes Biogas plant (8cft) adjoining to the dairy farm was installed to produce gas to cater the energy need of cooking and lighting of the house. Biogas slurry produced was used in preparation of vermi-compost.

This helps him to practise IPNS which is important to improve nutrient use efficiency. For meeting the emergency energy need, a generator (7.5 HP) has also been installed.

Production and Productivity

Rice yield was about 4t/ha, Mango (3 years old) yield was 5t/ha, while mosambi yield was 7.5tonnes/ha,buffaloes yielded 2500 lit/lactation, while a cow yielded 3000 liters per lactation with a lactation period of 300 days (5).

The fertiliser doses recommended are mentioned in **Table 2**.

Table 2 – Fertiliser recommendation for some crops in AP						
Crop	N	P ₂ O ₅	K ₂ O	Total		
Rice	160	80	80	320 kg/ha		
Mango	500 g/p	500 g/p	500 g/p	1.5/ plant		
Mosambi	1200 g/p	280 /p	320 /p	1.8/ plant		
50kg ZnSO ₄ , 7H ₂ O/ha was also added. Source: (3)						

The data presented in **Table 2** indicate that high amount of fertiliser is recommended by Acharya N G Ranga Agricultural University, Hyderabad. To get higher yield higher amount of fertiliser has to be applied.

As the yield was high, so was the profits. (**Table 3**) Once area was dominated by the energy starved poor Now slowly the area is turning into greenery and store house of wealth

	Table 3 - Farm economics						
SI no.	Components		Net profit (Rs)	% of the total income			
1 H	1 Horticulture						
М	ango	34	0,000.00				
М	Mosambi 50		00,000.00	30			
(fi	gronomy eld crop) ce	4,8	30,000.00	17.3			
3 P	oultry 5		0,000.00	1.8			
4 D	airy 12,0		00,000.00	43.0			
1	ermi - ulture	2,0	00,000.00	7.2			
To	otal	27,7	0,000.00	100			
So	ource (5)						

The data presented in the **Table 2** makes an interesting reading. The highest percentage of income of Mr Reddy comes from dairy farming (43%) followed by horticulture (30%). Food crop (rice) contributes only 17.3% of the income. The income scenario of the farm is likely to increase further when the fruit crops would provide higher income from 2012 onwards. It is interesting to note that vermi compost is being produced for the use in his farm and sale as well. The contribution of vermi compost to the farm income presently amounts to 7.2 % of the total income.

CONCLUSION

RAINFED AREAS HAS ITS INHERENT problem. But if one is able to master the necessary inputs like land, labour, capital and farm management skills, modern technology adopted through farming system mode can generate very high income. The challenges of rainfed areas thus can be converted into opportunities provided the supply of necessary inputs is insured and if the farm is located near big city which provides better market for the various farm products. For efficient use of inputs including fertilisers farming system approach is the answer.

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