SUCCESS STORIES OF PRACTITIONERS OF NATURAL FARMING IN SOUTH INDIA (2022-23)

SUBMITTED
BY
STATE DEPARTMENT OFFICIALS AND NGOs OF SOUTH INDIA

Compiled and Edited
by
DR. R. VASANTHA, PROFESSOR, EEI

DR. M. JAGAN MOHAN REDDY, DIRECTOR, EEI

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FOREWORD

Expanding food production and economic growth have often come at a heavy cost to the natural environment. There has been significant decrease in forest cover and biodiversity over the years. High-input, resource-intensive farming systems have caused massive deforestation, water scarcity, soil depletion and high levels of greenhouse gas emissions. A transformational process towards 'holistic' approaches such as agro-ecology, agro-forestry, climate-smart agriculture, and conservation agriculture is a necessity. Agro-ecological, eco-friendly practices such as Natural Farming result in better yields without compromising the needs of the future generations. Several studies have reported the effectiveness of natural farming in terms of increase in production, sustainability, saving of water use, improvement in soil health and farmland ecosystem. It is considered as a cost- effective farming practices with scope for raising employment and rural development.

Natural farming known by various names like Zero Budget Natural Farming, Prakrithik Krishi, Cow Based Natural Farming, Shashwat Kheti, Chemical Free Agriculture, etc. offers a solution to various problems, such as food insecurity, farmers' distress, and health problems arising due to pesticide and fertilizer residue in food and water, global warming, climate change and natural calamities. It also has the potential to generate employment, thereby stemming the migration of rural youth. Natural Farming, as the name suggests, is the art, practice and, increasingly, the science of working with nature to achieve much more with less.

Government of India is promoting Natural Farming through Bhartiya Prakrit Krishi Padhti (BPKP) and also under cluster basis in Paramparagat Krishi Vikas Yojana (PKVY). A dedicated online web portal is created by central government for promotion of Natural farming. Further States are encouraged to revise syllabi of agricultural universities to meet the needs of natural farming practitioners, ICAR committee drafted syllabus and course curriculum for inclusion in UG and PG courses and it already notified a dedicated Masters course in Organic farming.

This book on Natural farming entitled “Success stories of practitioners of Natural farming in South India” is a compilation of successful farmers stories by EEI, Hyderabad to impart excellent insights into the innovative methods adopted by farmers in Natural farming, inputs used and yields obtained in different South Indian states.

I am confident that the book would get a wider acceptance by all concerned who are engaged in the welfare of Indian farmers in general and practitioners of natural farming in particular and forms a valuable addition to the existing body of knowledge in Natural farming among Researchers, extension specialists, research scholars and farmers PAN India.

I take this opportunity to congratulate EEI, Hyderabad for the painstaking efforts to bring out this valuable compilation as a part of action research.

Dr. V. Sudharani
Director of Extension
PJTSAU

PREFACE

The present world faces with the greatest challenge ever faced by any sentient species-sustaining natural resources and Agriculture for supporting life on the planet, further there is a resurgence of interest in alternative agriculture in recent years for which Natural farming is considered as a sound and viable option in our country.

Over the past 50 years, greenhouse gas (GHG) emissions have nearly doubled and projections suggest a further increase by 2050. The largest share of global methane and nitrous oxide emissions is contributed by Agriculture as per the studies of FAO. Excessive use of fertilizers in conventional farming has significantly contributed to global greenhouse gas (GHG) emissions and climate change. The climate change will have an impact on global food security and may affect the nutritional properties of some crops .

Natural Farming aims to reduce risks associated with uncertainties of climate change by promoting the adoption of an agroecology framework. It encourages farmers to use low-cost homegrown inputs, eliminate the use of chemical fertilizers, and industrial pesticides. Natural Farming has shown evidence of increased resilience of farmlands along with protecting crops against extreme weather conditions by improving the fertility and strength of the soil. Natural Farming fields / crops / orchards show especially strong resistance to climatic fluctuation minimizing the revenue losses to the farmer due to adverse climatic conditions.

EEI, Hyderabad being a premier institute catering to the needs of all South Indian states and UTs, an attempt is made to compile available information on farmers successes in Natural farming for providing a basis for development of alternate farming systems that are sustainable and sound on long term basis.

Since the book provides insights into experiences of several practitioners in natural farming, I am sure it may help to stimulate further research on issues concerning the Natural farming.

The book comprising of carefully hand picked success stories of farmers practicing natural farming will benefit all those who are interested to increase their knowledge and understanding about natural farming. I am sure this book guides those enthusiastic entrepreneurs who wants to initiate Natural farming in their fields finally resulting in gradual and systematic adoption in farmers fields through out India.

Dr. M. Jagan Mohan Reddy
Director, EEI
Hyderabad

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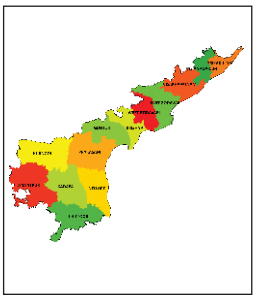


BIO CONTROL BRINGS LAURELS TO NATURALLY GROWN VEGETABLES IN TRIBAL AREAS OF ANDHRA PRADESH

Pangi Modno, Jodiguda village, Gasabha Panchayat, Dumbriguda mandal, Alluri Seethramaraju Dt, AP 6302696774

Documented by Dr.S. Kiran, Executive Director, VIKASA, NGO Andhra Pradesh

1	Age of the farmer	:	36 years
2	Education	:	No education - Illiterate
3	Experience in Natural farming (Years)	:	2 years
4	Source of information about natural farming	:	VIKASA, a 37 years young voluntary organization, working for tribal and farming community development in ASR and Anakapalli Districts
5	Background information (Crops grown earlier, reason for taking up natural farming etc.)	:	PangiModno is a tribal farmer from an interior village Jodiguda, 30Km from the mandal headquarters. He has 3 acre of land and cultivating vegetables like cabbage, radish, chilly, tomato and millet like finger millet (ragi), little millet (sama), coffee and black pepper in slope land. He also cultivates niger in early rabi. He has 2 desi cattle and cattle shed with concrete flooring with urine collection tank. He has two 200 liters capacity water tanks for preparation of liquid Jeevamrutham. He is also having bio mass based manure pit in his farm. Modno participated in an exposure visit conducted by VIKASA in 2021 to Natural farm practicing famer fields in Badimela village of Dumbriguda mandal at distance of 40 Km from his village along with other selected farmers from his neighboring villages.
6	Area under natural farming (acres/ha)	:	3 acres (In his entire land) - 100% natural farmer – S2Sw
7	Farming system (rainfed /irrigated/ ID (Irrigated dry)	:	Rain fed
8	Soil type	:	Silty loamy red soils
9	Crops grown under Natural farming	:	Vegetables - Cabbage, Tomato, Chilly and Radish Millet – Finger millet / ragi, little millet / Sama Cereals – Paddy Spices – Black pepper Plantation - Coffee
10	Details of livestock /Poultry / Fisheries / Swine		One cow and a bullock
11	Certification details		-
12	Inputs used		Seed treatment - Beejamrutham,

Soil enrichment - Solid and liquid jeemruthams, Bio mass based manure

Decoctions - Brahmastram, Agnastram, ThutikadaKashayam

Bio control agents -baveria, metarizium, tricho derma viridea, Pseudomonas, tricho cards

Pest monitoring - pheromone traps, yellow cards and physical observations

13 Practices adopted (Seed to harvest) : *Cabbage*

Nursery management – 10 Kg Solid and 10-liter liquid, Jeevamrutham 100 grams Bavaria with 15 liters water applied.

Transplanted 30 days seedlings after application of solid Jeevamrutham in the pits at 45 cm x 45 cm spacing. Application of Liquid Jeevamrutham at 10 days interval, one time weed management and inter cultivation in the crop period.

Initially diamond back moth and tobacco caterpillar got controlled with Brahmastram and Agnastram but later they were not helpful. Then, pest was successfully controlled with Bio control agents Bavaria, metarizium and bacillus. Pseudomonas successfully controlled diseases

Yellow sticky plates, Pheromone traps and bird perches were kept in the crop for pest monitoring

Inter crop – Radish

Border crop – Maize

Trap crop – marigold

Finger millet – Guli method of cultivation – transplantation of 18 days young plants with 30 cm * 30 cm spacing, application of solid and liquid jeevamruthams, weeding with cycle weeder and plough, pulling log over the finger millet plants. Yellow sticky plates and bird perches were kept in the crop for pest monitoring

Paddy – Line sowing 30 cm spacing between the lines and 10 to 15 cm spacing between the plants. Planting young plants at 25 days age, weeding with cono weeder at 15 days interval, application of solid and liquid jeevamruthams at 20 days interval. Brahmastram, Thutikada decoctions twice, pseudomonos one time and bavariva one time. Yellow sticky plates, Pheromone traps and bird perches kept in the crop for pest monitoring

14 Marketing details : Marketed in the shandy (local market) and through FPO

15 Occupation of the respondent : Farmer

16 Supporting Institutions / Agency : VIKASA

17 Challenges in Natural farming and Solutions adopted to overcome them

S.No	Challenges faced in Natural farming	How the challenge was addressed
1	Heavy rains during crop period	Draining out surplus water through drains saved the crop and the crop cultivated under Natural Farming practices were found to withstand heavy rains. Conventional farmers lost their crop due to heavy rains.

S.No	Challenges faced in Natural farming	How the challenge was addressed
2	Diamond back moth pest in crop	Pest was successfully controlled with bio agents
3	Lack of marketing	This problem can be addressed by creating marketing avenues for natural farming products and by providing support prices to farmers

18. Subsidies availed : Nil

19. Comparison between Natural Farming and Conventional Farming

S no	Natural farming with Bio controls			Conventional	
	Details	Qty	Amount in ₹	Qty Unit	Amount in ₹
	Cabbage + Radish + Marigold + Maize			Cabbage	
1	Seed cost	100 grams	1500	100grams	1500
2	Ploughing cost	0.5acre	1500	0.5 acre	1500
3	Nursery management		500		500
4	Ghana Jeevamrutham for nursery	10Kg	10		60
5	Transplantation	1acre	1500	1 acre	1500
6	Weeding and loosening of earth - 2 times	16person days	3200	16 person days	3200
7	Drava Jeevamrutham – 3 times	300liters	300	2 Urea bags	1000
8	Ghana Jeevamrutham	200Kg	200	0.5 DAP bag	675
9	Decoctions	60liters	600	8 times pesticides	8000
10	Yellow sticky plates	10No's	200		0
11	Pheromone traps	2nos	120		0
12	Bird perches	10nos	100		0
13	Bavaria	1500Grams	750		0
14	Metaryzium	300Grams	150		0
15	Bacillus	200Grams	100		0
16	Pseudomonas	200grams	100		0
17	Tricho cards	3Cards	150		0
18	Harvesting	3Person days	600	3 Person days	600
19	Transportation	96.066Quintals	1000	50.22 quintals	800
20	Total expenditure		12580		19335
21	Returns	96.066@600/ quintal	57640	50.22 @600/ quintal	30132
22	***Net profit***		***45060***		***10797***

20 Benefits and achievements

1. Saving of ₹ 6755 is noticed in cost of cultivation of Natural farming compared to conventional method. It means 53% of investment on inputs is saved.
2. In the conventional practices farmer recorded 50.22 quintal / 0.5 acre and in the natural farming, farmer recorded 96.06 quintal / 0.5 acre. It means Natural farming farmer recorded 91% additional yield over the conventional farmer. This is due to controlling pest damage with bio control agents and crop withstanding for the heavy rains during the crop period.
3. It was noticed that cabbage cultivated under natural farming is withstanding cyclones and drought, whereas crop cultivated under chemical practices is not able to withstand the same.

21	Extent of spread to other farmers/ villages	VIKASA conducted exposure visits to 298 farmers from 16 villages along with NF staff from 2 panchayats of 2 mandals to Modno fields. All these farmers inspired with the crops performance and interacted with Modno and learned about practices. It was learnt that 135 farmers-initiated NF practices in Ragi, paddy and cabbage with continuous follow-up of VIKASA
22	Awards/recognition received	Nil
23	Farmers suggestions on extending natural farming to unreached areas	Demonstrations at farmer / village level and mobilizing farmers and staff to demonstration plots will bring the change
24	Any other information	Farmers procured bio inputs from Bio – control lab (VISWAM processing unit) of VIKASA in Sagaram village with the support of Regional agricultural research station (RARS), ANGR Agricultural university made this possible to farmers to cultivate cabbage without pesticides.

Larvae affected by Metarhizium fungus in the natural farmer field

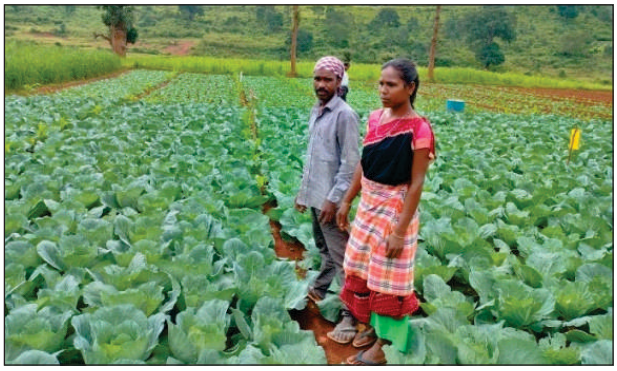
Wife of the farmer applying manures in naturally grown paddy

Farmer family applying Dravjeevamrut in Naturally grown crops

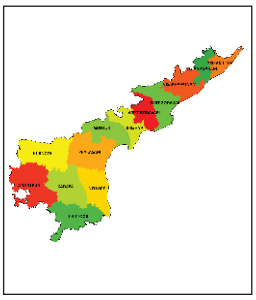
Visitors from Natural positive farming & wholesome foods foundation (N+3F), Bangalore farmer interaction on 29th Sep, 2022

Modno with wife in his cabbage plot

Smt Appalamma w/o Modno in finger millet crop cultivated under Guli method



Modno with wife in his cabbage plot



NATURAL FARMING ATTRACTS FARM GATE SALES

V. Chinna Yogeshwararao Vengayapalem, Kurichedu, Prakasam, Andhra pradesh 523304. 9000265007

Submitted by Officials of Department of Agriculture, Prakasam District, Andhra Pradesh

1.	Age of the farmer	:	42 years
2.	Education	:	10th
3.	Experience (years)	:	4years
4.	Sources of information	:	Officials of APCNF
5.	Background information (Crops grown earlier, reasons for taking up)	:	Since the age of 20 years, we were doing chemical farming. I have been farming since I was a child. We did chemical farming in our own farm of 5,00 acres, due to the use of chemical fertilizers, the costs become high and the crops did not yield and could not get investment also. We got very sick from inhaling pesticides while spraying. Because of that, hospital visits and medicines cost increased. Some of the money we got was paid to clear off debts, the family situation and agriculture seemed discouraging. In the year 2018, SDA Meridetilla CRP Jangayya came to our village and a meeting was arranged for our community. In this meeting, the losses due to chemical agriculture and benefits of natural agriculture were explained. They said that land also becomes fertile. It has been explained that the pesticide residue gets accumulated in grains and when we eat these toxic foods we face health problems. They added that by growing crops in the natural farming method, the investment can be reduced and the yield is promising. Land pollution, atmospheric pollution, ground, water pollution can be reduced. Health problems can be avoided by growing and eating non-toxic food items. It was also explained that the cultivation of greens and vegetables in the backyard by natural farming can prevent food related problems. Growing and eating natural crop products provides better nutrients at lower cost. APCNF programs were shown through PICO projector. APCNF officers taught us about the methods of Palekar which inspired me to initiate natural farming. I started applying liquid bioamrit to the paddy crop. It seemed very good, so I continued in the second season with PMDS (Pre Monsoon Dry Sowing) in Kharif. Since then, in my 5 acres I have been growing crops like Redgram, Ridgegourd, Bittergourd and vegetables.
6.	Area (acres/ha)	:	5
7.	Farming system (rainfed/irrigated) / ID (Irrigated Dry)	:	Irrigated

8. Soil type:Black soils

9. Crops grown : Paddy, Redgram, Ridgegourd, Bittergourd and vegetables

10. Details of livestock/poultry/ fisheries/swine etc (if any) : 4 buffaloes, 2 cows, NPM shop

11. Certification details : Nil

12. Inputs used : Solid and liquid formulations, concoctions and growth promoters

13. Practices adopted (seed to harvest) : Beejamrut, Ghana and Drava Jeevamrutas, Agniasthram, Sontipala Kashaya and sour buttermilk were used.

14. Marketing details : Earlier the local market people bought paddy and Redgram. The yield in APCNF is good. Now employees of Kuricchedu mandal visited my field to buy grain as it is grown under natural farming method. Inspired by this, i converted the paddy into rice and sold it to Kuricchedu, Darshi, Vinukonda villages and Hyderabad along with vegetables.

15. Occupation of the respondent : Agriculture

16. Supporting Institutions / Agency : Through RYSS-APCNF project district level staff are giving us advice and suggestions from time to time.

17. Challenges in Natural farming and Solutions adopted to overcome them

S.No	Challenges faced in Natural farming	Solutions adopted to overcome
1	Lack of marketing	Providing good price to natural farming products will spread it in more area.
2	Not aware of dosage of potions used	The APCNF staff has informed dosages and frequency of solid and liquid infusions that should be sprayed
3	Growing single crop	Farmers are made aware of the use of intercropping and protection crops.

18.Subsidies availed : nil

19.Comparison between Natural Farming and Conventional Farming :

Parameters	Natural Farming (1 ha)	Conventional Farming (1 ha)
Crop	Lime	Lime
Cost of cultivation (Rs)	18350	25000
Gross return(Rs)	90400	110000
Net return (Rs)	72050	85000

20. Benefits and achievements:

1. Cost reduced and yield increased
2. Educated people, employees are visiting farmer field and buying natural produce

21. Awards/recognition received : Nil

22. Extent of spread to other farmers /villages : 204 farmers left chemical farming and switched to natural farming by seeing my success and bought inputs from NPM Shop.

23. Farmers suggestions on extending to unreached areas : Prakruthi agricultural staff telecasted soil mother video and explained olden days methods of farming and health benefits of eating that produce and ill effects of today's chemical farming.

Training on Natural farming

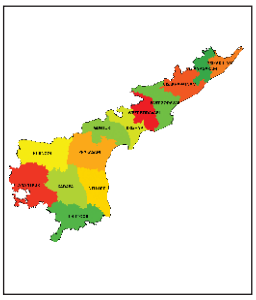
Sowing paddy seeds with drum seeder

Preparation of Natural farming inputs

Application of Natural Farming inputs in paddy fields

Crop cutting experiment

Sale of inputs in Natural farming shop



NAVADHANYA SCRIPTS SUCCESS STORY IN NATURAL FARMING IN AGENCY AREAS OF ANDHRA PRADESH

Killo Guru and wife Guru Buddi, Panasaputtu village, AramaPanchayat, Dumbriguda mandal, Alluri Seethramaraju Dt, AP 9491955083

Submitted by K. Prasad rao and Dr. S. Kiran, VIKASA, NGO, Andhra Pradesh

1.	Age of the farmer	:	53 Years
2.	Education	:	No education - Illiterate
3.	Experience in Natural farming (Years)	:	1.5 years
4.	Source of information about natural farming	:	VIKASA
5.	Background information (Crops grown earlier, reason for taking up natural farming etc.)		Killo Guru is a tribal farmer from a village Panasaputtu in Aram panchayat at a distance of 10 Km from the mandal headquarters Dumbriguda. He has 3 acres of land and is cultivating paddy, cabbage, radish, ginger, turmeric, chilly, tomato, finger millet (ragi) and little millet in plain lands and coffee &black pepper in slope land. He also cultivates niger in early rabi. His wife Guribuddi and his 2 educated children supports him in inputs / decoctions preparations, application and in all other agricultural operations. He has 2 desi cattle and a 200 liters capacity water tank for preparation of liquid Jeevamrutham. Farmer participated in an exposure visit conducted by VIKASA in 2021 to Natural farming practicing farmer fields in Badimela village of Dumbriguda mandal at adistance of 2.5 Km from his village. Along with other selected farmers from his neighboring villages, he visited Guli Ragi, ginger crop raised on broad beds, paddy line sowing, liquid and solid Jeevamruthams prepartion and came to know about bio control agents like baveria, metarizium, tricho derma viridae, pseudomonas, tricho cards, pheromone traps, yellow cards etc He got impressed with the crop's performance grown without chemical fertilizers and pesticides and started to believe that crops can be successfully cultivated only with natural and bio inputs. He interacted with the demonstration farmers and noted all the practices with time frame
6.	Area under natural farming (acres/ha)	:	1.5 acres
7.	Farming system (rainfed /irrigated/ ID (Irrigated dry)		Irrigated – 1.5 acre – Paddy Rainfed – 1.5 acre.
8.	Soil type	:	Silty loamy soils
9.	Crops grown under Natural farming	:	Paddy, Tomato, Turmeric and Ginger
10.	Details of livestock /Poultry / Fisheries / Swine etc (if any)	:	Two bullocks
11.	Certification details	:	-
12.	Inputs used	:	Seed treatment - Beejamrutham, Soil enrichment - Solid and liquid jeemruthams, bio mass based manure

Decoctions - Agnastram, Thutikada Kashayam

Bio control agents -Baveria, metarizium, tricho derma viridi, Pseudomonas, tricho cards

Pest monitoring - Pheromone traps, yellow cards, bird perches and physical observations

13. Practices adopted (Seed to seed) : Paddy

1. Ploughing / land preparation for "Navadhanya" seed sowing during 1st week of may
2. Navadhanya sowing 1st or 2nd week of May
3. Puddling and incorporating 45 days plants in the soil with tractor or power tiller in 3rd or 4th week of June
4. Application of 400 Kg / acre Ghana Jeevam rutham in the main field after puddling on 4th of June
5. Line sowing of 12 to 20 days old seedlings in the main field with a spacing of 30 cm between the rows and 15cm to 20cm between the plants in 1st week of July
6. Weeding with cono weeder at 15 days, 30 days and 45 days after the transplantation
7. Application of Drava Jeevamrutham every time after the weeding with cono weeder
8. Based on the pest and disease incidencedecoctions and bio control agents are used as follows:
   a) Brahmastram and Agnastram for sucking pest, leaf folder and stem borer
   b) Thutikada kashayam for brown hopper control
   c) Pseudomonas to control blast and sheath blight
   d) Bavaria and metarizium to control leaf folder and stem borer
9. Yellow sticky plates (15/acre), pheromone traps (4/acre) and bird perches (15 / acre) are kept in the plot to monitor pest

14. Marketing details : Kept for own consumption

15. Occupation of the respondent : Farmer

16. Supporting Institutions / Agency : VIKASA

17. Challenges in Natural farming and Solutions adopted to overcome them

S.No	Challenges faced in Natural farming	How the challenge addressed
1	Heavy rains during panicle initiation stage	Brown hopper observed in the field and it was controlled with Thutikada decoction and Metarrhizium

18. Subsidies availed : Nil

19. Comparison between Natural Farming and Conventional Farming

S No	Item	Natural farming plot	Chemical plot
1	Farmer name	Killo Guru	Killo Ramnaidu
2	Village	Panasaputtu	Panasaputtu
3	Crop	Paddy	Paddy
4	Variety	PILLA TOKI, local variety	PILLA TOKI, local variety
5	Extent	1 Acre	1 Acre
6	Soil type	Loamy	Loamy
7	Irrigation / rainfed	Gravity irrigation	Gravity irrigation
8	Kharif or Rabi	Kharif, 2022	Kharif, 2022

In the CCE conducted on 23.11.2022 in both Navadhanya and chemical farming plot, Navadhanya plot recorded 14.46 kg of paddy grain yield in 5m x 5m. Whereas in chemical plot it was recorded 7.7 Kg in 5m x 5m.

Per acre Inputs expenditure and returns

S no	Natural farming			Chemical farming	
	Item	Details	Amount in ₹	Details	Amount in ₹
1	Navadhanya seed cost	20 Kg	1500		0
2	Plough cost	1acre	2500		0
3	Paddy seed cost	16Kg	320	30Kg	600
4	Nursery management		200		200
5	Ghana Jeevamrutham for nursery	10Kg	10		50
6	Puddling	1acre	3000	1acre	3000
7	Transplantation	1acre	1500	1acre	2000
8	Weeding	3 times with Cono weeder	1200	2 times manual	5000
9	Drava Jeevamrutham – 3 times	600 liters	600	3 Urea bags	1500
10	Ghana Jeevamrutham	400Kg	400	1DAP bag	1350
11	Decoctions	60liters	600	3Pesticides	1500
12	Yellow sticky plates	15No's	300		0
13	Pheromone traps	4nos	240		0
14	Bird perches	15nos	200		0
15	Harvesting	10Person days	2000	10Person days	2000
16	Transportation	23.43Quintals	900	12.5quintals	500
	Total expenditure		15470		17700
	Returns	@1800/quintals	42174	@1800/quintals	22500
	Net profit		**26704**		**4800**

20. Benefits and achievements:

1 Farmer saved ₹2,230 (12.5%) on inputs and achieved additional yield of 10.93 quintals (87%) and additional profit of ₹19, 674.

2 Besides the high yield and net profit, soil is enriched and will support the next crops. Whereas in chemical farming soil looses the useful microbes and damage the human health too.

3 Natural farming practice provided about 20 tons of live bio mass to the field. This was calculated based on the Crop Cutting Experiment (CCE) in Natural farming plots. 125 Kg bio mass was recorded in 5 m * 5m plots.

4 The bio mass was converted in to manure and boosted the carbon percentage in the soil. As 12 varieties of seeds are used in the Navadhanya, soil gets different types of nutrients.

5 High incidence of blast was noticed in the chemical paddy plots next to farmer plot. Whereas it affected only 0.05% of Natural farming crop.

6 It was also noted that 5 to 6 tillers appeared in chemical paddy, whereas 15 to 20 tillers were found in the Natural farming plot.

7 5% chaffy grains were noticed in Natural farming plot where as they are double in Chemical plot.

8 Birds, spiders and dragon flies were observed in the plot, all these beneficial insects controlled the pest a lot.

9 Line transplantation saved 30 person days and cono weeder saved 68 person days wage in weed control and it also incorporated weeds into the soil which later turned as manure.

10 Crop withstood the drought situation

21. Extent of spread to other farmers/ villages : Killo Guru Paddy field was shown as a role model by VIKASA in its exposure visit conducted to 150 farmers coming from 19 villages along with NF staff from Arama panchayats. Sri Pari Naidu, Jattu organization, Parvathipuram Mr Ram, Mr Swamy, and Ms Gargi from APF, 30 officers from Delhi as part of training in VIKASA, 20 staff members from Agragami, Odisha visited the plot and appreciated farmer practices and impressed with the crop performance and interacted with Guru and his wife and learned about practices with time frame. It was learnt that 3 farmers cultivated paddy in Rabi and 95 initiated NF practices in Finger millet and paddy with continuous follow-up of VIKASA

22. Awards/recognition received : Nil

23. Farmers suggestions on extending natural farming to unreached areas : Demonstrations at farmer / village level and mobilizing farmers and staff to demonstration plots will bring the change

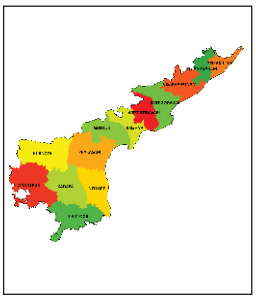
Navadhanya (9) seeds used for Pre Monsoon Dry Sowing (PMDS) in natural farming field by farmer

Lush green growth of Navadhanya seedlings

Incorporating Navadhanya 45 day old plants in to the soil with power tiller

Paddy line sowing after incorporating PMDS 45 day old Navadhanya seedlings in the soil

Farmer's Pest observation in the field



NATURAL FARMING BOOSTS FOOD SECURITY FOR ANDHRA FARMERS

**KoppoluVenkata Aravind Babu, S/o Nageswararao,
S.N.Padu (V), S.N.Padu(M), Prakasam (Dt),
Andhra Pradesh 523157, 8555092536**

Submitted by Officials of ATMA, Prakasam District, Department of Agriculture, Andhra Pradesh

1. Age of the farmer : 44 Years
2. Education : Degree (B.A)
3. Experience in Natural farming (years) : 5Years
4. Sources of information about natural farming : Youtube, Palekar Videos, Press News & STRY Training given by ATMA.
5. Background information (Crops grown earlier, reasons for taking up natural farming etc.) : Earlier Tobacco and Chilli crops were grown. To improve soil health and to get healthy food, the farmer diverted to cultivation of Horticulture crops under Natural farming
6. Area under natural farming (acres/ha) : 6 acres
7. Farming system (rain fed/Irrigated) / ID : Bore well and Drip
8. Soil type : Light Soil
9. Crops grown under Natural farming :
   1. Guava with Ridge Gourd, Bottle gourd, Snake gourd, Bitter gourd and Cucumber as inter crops.
   2. Drum stick - border crop
   3. Brinjal
10. Details of livestock/poultry/ fisheries/swine etc (if any) : Nil
11. Certification details : Nil
12. Inputs used : Jeevamrutam, Panchagavya, Dasaparnikashaayam, Fermented butter milk Neemaastram, Neem cake, Neem oil, FYM, Vermi compost, Mattidravanam
13.. Practices adopted (seed to harvest) : Basal application of Ghanajeevaamrutam, Vermi compost and Dravajeevaamrutam through Drip system.
14. Marketing details : Guava sold @50/-kg at farm gate
15. Occupation of the respondent : Farming
16. Supporting Institutions/Agency : Agriculture Department
17. Challenges in Natural farming and Solutions adopted to overcome them

S.No	Challenges faced in Natural farming	Solutions adopted to overcome
1	Purchase of cow	Planning to purchase cow but at present purchasing cow dung and urine from nearby village
2	Preparation of Botanical extracts	Preparing botanical extracts on his own
3	Availability of water resources	Obtained drip from Horticulture Department

18. Subsidies availed : Drip-90% subsidy

19. Comparison between Natural Farming and Conventional Farming :

Parameters	Natural Farming (1 ha)	Conventional Farming (1 ha)
Crop	Guava	Guava
Cost of cultivation(Rs)	Rs.2,75,000/-	Rs.3,25,000/-
Production Q/T/Kg	25T	22.5T
Gross income(Rs)	Rs.12,50,000/-	Rs.9,00,000/-
Net returns	Rs.9,75,000/-	Rs.5,75,000/-
B C ratio	4.54	2.76

20. Benefits and achievements:

1. Personal satisfaction is the major benefit as farmer is getting chemical free vegetables.
2. Soil health improved

21. Extent of spread to other farmers/ villages : 3 acres are cultivated by 2 farmers

22. Awards/recognition received : Nil

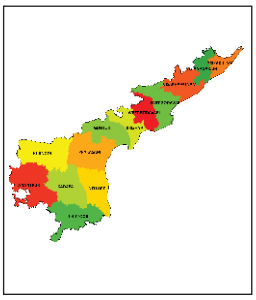
23. Farmers suggestions on extending natural farming to unreached areas : Financial support for the infra-structure required for preparation of botanical extracts and for the purchase of cow.

24. Any other information : Needs continuous capacity building

Preparation of Natural farming inputs by farmers




Field activities performed by farmers in natural farming fields

NATURAL FARMER REAPING PREMIUM PRICE

Bolla Ravi Chandra Reddy, Porumamilla Mandal, Rangasamudram Panchayat, Kammavari Palli Village, Kadapa District, Andhra Pradesh 516216, 8897258476

Submitted by Officials of ATMA, Kadapa, Department of Agriculture, Andhra Pradesh

1. Age of the farmer : 42 Years
2. Education : 10th Class
3. Experience in Natural farming (years) : 2 years
4. Sources of information about natural farming : ICRPs working in AP RySS (Andhra pradesh Rythu Sadhikara Samstha)
5. Background information (Crops grown earlier, reasons for taking up natural farming Etc.) : Farmer was growing Chilli earlier with conventional methods. The soil was infertile and yields were average and cost of cultivation is very high.

   ICRPs working in the APCNF- RySS conducted meetings in his village on Natural farming and explained its health and other benefits. He thought of giving a trial and practiced natural farming in 50 cents and later extended to one acre of land.
6. Area under natural farming (acres/ha) : 1.00 Acre
7. Farming system (rainfed/irrigated) / ID (Irrigated Dry) : Bore well
8. Soil type : Black soils
9. Crops grown under Natural farming : Chilli, Tomato, Onion
10. Details of livestock /poultry/ fisheries/swine etc. (if any) : Buffaloes-2, Chickens-11
11. Certification details : Enrolled in internal control system through RySS
12. Inputs used : Ghanajeevamrutham, Dravajeevamrutham, Beejamrutham, Neemastram, Fish Amino Acids etc
13. Practices adopted (seed to harvest) : Seeds of Chilli, Tomato, Onion

    Sown and inputs such as Ghanajeevamrutham, Dravajeevamrutham, Beejamrutham, Neemastram, Fish Amino Acids etc were applied and produce is sold in local markets.
14. Marketing details : As the farmer know that the produce from natural farming is better than the one grown with chemical fertilizers, his produce is sold in local bazars at 10 % premium price compared to chemical produce.
15. Occupation of the respondent : Agriculture
16. Supporting Institutions / Agency : AP RySS
17. Challenges in Natural farming and Solutions adopted to overcome them

S.No	Challenges faced in Natural farming	Solutions adopted to overcome
1	Cultivation of multiple crops under Natural farming	Took training and visited the model farms.

S.No	Challenges faced in Natural farming	Solutions adopted to overcome
2	Lack of proper knowledge about crops	The staff working in AP RySS are giving training on crop management practices.
3	Inputs Availability	Bio input shop should be established.

18. Subsidies availed : No

19. Comparison between Natural Farming and Conventional Farming

Parameters	Natural Farming (1 Acre)	Conventional Farming (1 Acre)
Crop	Chilli	Chilli
Cost of cultivation (Rs)	45300	65321
Production Q/T/Kg	20Q	20Q
Gross return (Rs)	155356	132456
Net return (Rs)	110056	67135
B C ratio	2.42	1.0

20. Benefits and achievements:

Cost of cultivation is reduced; land became fertile, Soil pollution is reduced under Natural farming.

21. Extent of spread to other farmers/ villages : Fellow farmers are coming forward after seeing the results in the fields of Natural farming.

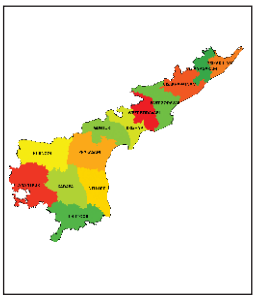
22. Awards/recognition received : No

23. Farmers suggestions on extending natural farming to unreached areas : Support may be provided in terms of good price, marketing and inputs preparations.

Preparation of Natural farming inputs

Farmer observing yellow sticky traps

Farmers in Natural farming fields



SHRI BABU: SOURCE OF INSPIRATION FOR MULTICROPPING UNDER NATURAL FARMING

D.Babu, Gajulapalli, Amaravati, Sri Sathyasai Andhra pradesh 522020, 6302131374

Submitted by Officials of ATMA, Anantapuramu, Department of Agriculture, Andhra Pradesh

1. Age of the farmer : 34
2. Education : 10 th
3. Experience in Natural farming (years) : 5
4. Sources of information about natural farming : RySS - APCNF Staff and DPM
5. Background information (Crops grown earlier, reasons for taking up natural farming etc)- : Ground nut, vegetables, fruit crops
   Reasons for shift:
   1. To reduce investment on pesticides and fertilizers
   2. To increase soil fertility
   3. To increase productivity
   4. To protect nature and natural resources
6. Area under natural farming (acres/ha) : 1 acre
7. Farming system (rainfed/irrigated) / ID rainfed : Rainfed
8. Soil type : Red soil
9. Crops grown under Natural farming : 1.Leafy Vegetables 2. Field bean 3. Jowar 4.Bajra 5 Castor 6. Coconut 7.Mango 8.Guava 9.Pomegranate 10.apple
10. Details of livestock/poultry/fisheries/swine etc (if any) : Poultry (hens), Cow(1).
11. Certification details : This year he is eligible item for PGS Certification
12. Inputs used : 3150 kgs Ghanajeevamrutham, Bheejamritham, DravaJeevamrutam, Neemasthram, Sour butter milk, Mulching
13. Practices adopted (seed to harvest) : Ganajeevamrutham, dravajeevamrutham, neemastram, Sour butter milk
14. Marketing details : Self consumption, sold to SHGs, VOs, Within Village and Mandal
15 Occupation of the respondent : Farming, Backyard Poultry
16. Supporting Institutions / Agency : RySS Project and State Government
17. Challenges in Natural farming and Solutions adopted to overcome them

S.No	Challenges faced in Natural farming	Solutions adopted to overcome
1	Water scarcity	PMDS
2	Less soil fertility	Ghana jeevamrutham,DravaJeevamrutam
3	Pest and flies	Neemastrhram,Sour Butter milk, Mulching

18. Subsidies availed :----No

19. Comparison between Natural Farming and Conventional Farming

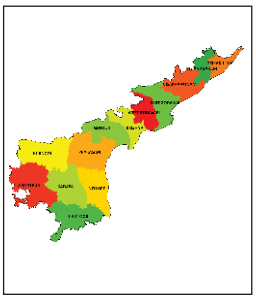
Parameters	Natural Farming (1 ha)	Conventional Farming (1 ha)
Crop	10-20crops	2-3 crops
Cost of cultivation (Rs)	52,015	90,000
Gross return(Rs)	1,58,180	1,50,000
Net return (Rs)	1,06,165	60,000
B C ratio	1:2.04	1:0:66

20. Benefits and achievements

1. Healthy life style & good improvement in finances
2. Healthy soil
3. Less investment, more income
4. Better water management

21. Extent of spread to other farmers/ villages : Spread to 60 villages
22. Awards/recognition received : Appreciated by ICAR, APPI Team and State Officers
23. Farmers suggestions on extending natural farming to unreached areas : To spread the benefits of natural farming
24. Any other information : Farmer is practicing Natural backyard poultry, hotel and other Business in addition to Natural Farming

Farmer observing his Naturally farmed fields



MANDAL ANCHOR IN ZERO BUDGET NATURAL FARMING IS NOW A NATURAL FARMER

Daddala Rama rao S/o Kotaiah, Padarthi(v), Kothapatnam(M), Prakasam (Dt), Andhra Pradesh 523286, 9505826519

Submitted by officials of ATMA, Ongole, Prasakam District, Department of Agriculture, Andhra Pradesh

1.	Age of the farmer	:	60 Years
2.	Education	:	10th
3.	Experience in Natural farming (years)	:	2Years
4.	Sources of information about natural farming	:	Other farmers and trainings given by the Agriculture Department
5.	Background information (Crops grown earlier, reasons for taking up natural farming etc.)	:	Paddy, Bengal gram. Reasons for shift : To improve soil health and to obtain chemical free food by reducing soil, water & air pollution.
6.	Area under natural farming (acres/ha)	:	2 acres
7.	Farming system (rain fed/Irrigated) / ID (Irrigated Dry)	:	Bore well
8.	Soil type	:	Sandy Soil
9.	Crops grown under Natural farming	:	Groundnut, Vegetables
10.	Details of livestock /poultry / fisheries /swine etc.	:	-
11.	Certification details	:	No
12.	Inputs used	:	Dravajeevaamrutam, Neemaastram,Brahmastram, Agniastram. Dasaparnikashaayam, Saptnadhaanyankura Tonic, Fermented butter milk , Beejaamrutam, Boodida-mootramDravanam
13.	Practices adopted (seed to harvest):		Cultivation of Navadhanyaalu (9 crop seeds), seed treatment, application of cow dung ash mixed with cow urine for every 5days through sprinklers (30times in crop season) and spraying fermented buttermilk for every 15days.
14.	Marketing details	:	Local market and sold to consumers directly.
15.	Occupation of the respondent:	:	Farming and mandal Anchor in ZBNF
16.	Supporting Institutions/Agency	:	Agriculture Department

17. Challenges in Natural farming and Solutions adopted to overcome them

S.No	Challenges faced in Natural farming	Solutions adopted to overcome
1	Marketing problem	Local sales
2	Certification and Tenancy	-
3	Financial assistance for the infra-structure	-

18. Subsidies availed : Subsidy for NPM shop, Cow Shed, 1Cow, Pulverizor

19. Comparison between Natural Farming and Conventional Farming :

Parameters	Natural Farming	Conventional Farming (1 ha)
Crop	Groundnut	Groundnut
Cost of cultivation(Rs)	Rs.1,30,000/-	Rs.1,62,500/-
Production Q/T/Kg	31.5Q	30Q
Gross income(Rs)	Rs. 2,88,750/-	Rs. 2,07,500/-
Net returns	Rs.1,58,750/-	Rs. 45,000/-
B C ratio	2.22	1.27

20. Benefits and achievements:

1. Maintain Soil health and take healthy produce
2. Reduces air and soil pollution
3. Cost of cultivation is reduced

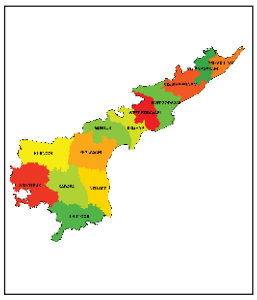
21. Extent of spread to other farmers/ villages : 90 Acres, 70 farmers in Padarthi village
22. Awards/recognition received : Training Certificates - 5
23. Farmers suggestions on extending natural farming to unreached areas : Trainings, Field Visits

Natural farming products preparation in farmer field

Cow based farming board in farmers field

Natural farming products

Containers with Natural farming products



SMART NATURAL FARMING IS THE NEED OF THE HOUR

Gullapalli Sujatha, Pedarikatla village, Konakanamitla Mandal, Prakasam district, Andhra Pradesh 523241, 9444055548 / 7806885323

Submitted by the Office of the Director, ATMA, Mangalagiri, Department of Agriculture, Andhra Pradesh

1. Age of the farmer : 58 years
2. Education : B.A
3. Experiencein Natural farming (years) : 8 years
4. Sources of information about natural farming : Traditional farming families, Natural farming training conducted by AP Government on ZBNF
5. Background information (Crops grown earlier, reasons for taking up natural farming etc): : Pulses, millets, chilli, turmeric, oil seeds, vegetables and fruits. Reasons
   To produce healthy and nutritious food and to protect soil & environment.
6. Area under natural farming (acres/ha) : Around 50 acres.
7. Farming system(rainfed /irrigated) / ID : Rainfed
8. Soil type : Red loamy soil.
9. Crops grown under Natural farming : 1.Pulses 2.Millets 3.Spices 4.Oil seeds 5.vegetables & fruits
10. Details of livestock/poultry/ fisheries/swine etc(if any) : 6 Desi cows; 50 country chicken
11. Certification details : NPOP from control union.
12. Inputs used : Farm yard manure, green manure, Jeevamrutham, Ghana jeevamrutham, Home made herbal extracts for pest management
13. Practices adopted(seed to harvest) : Pre-monsoon dry sowing, seed treatment, Jeevamrutham, FYM and herbal extract and limited tillage, Drip irrigation, Low tech Precision agriculture tools. Remote sensing information.
14. Marketing details : Self marketing after value addition.
15. Occupation of the respondent : Women farmer & house wife
16. Supporting Institutions/Agency : RYSS, Dept.of Agriculture -Andhra Pradesh Government
17. Challenges in Natural farming and Solutions adopted to overcome them

S.No	Challenges faced in Natural farming	Solutions adopted to overcome
1	Water scarcity	Drip irrigation, farm ponds, PMDS method to protect soil and reduce evaporation.
2	Labor shortage	Adoption & learning of new technologies and adoption of automation.
3	Pest control & Marketing	Using available herbs in the farm and surrounding area. Using social media, exhibitions, trade fairs to showcase our products.

18. Subsidies availed: For Drip irrigation and farm ponds.

19. Comparision between Natural Farming and Conventional Farming :Natural farming aims to grow crops with environmental and ecological consciousness. Natural farming avoids harmful chemical fertilizers, chemical pesticides and gives healthy and nutritious food, It maintains sustainability, Bio-diversity and soil health. Conventional farming: It aims to improve agricultural production significantly. Conventional agriculture techniques employ intense external inputs such as chemical fertilizers, insecticides, pesticides and GMO to increase production in short time.

Parameters	Natural Farming (1 ha)	Conventional Farming (1 ha)
Crop	Chilli	chilli
Cost of cultivation(Rs)	Rs.80900	Rs.250000/
Production Q/T/Kg	15 quintals (dry chilli)	35 quintal
Gross return(Rs)	Rs.600000 (with value addition)	Rs.700000/
Net return(Rs)	Rs.519100/	Rs.450000/
BC ratio	6.42	1.8

20. Benefits and achievements:

1. Less input cost, sustainable, environmental friendly, healthy and nutritious food for humans and the live stock and country fowl.
2. More production witnessed in Millets cultivation.
3. Good market value for the Natural farming products.

21. Extent of spread to other farmers/ villages : More than 20 farmers inspired and practicing Natural farming.

22. Awards/recognition received : Best women farmer award from Govt.of.Andhra Pradesh (2016, 2017). Excellence in farming award from Sakshi news foundation in the year 2017.Best women farmer award from Rythu nestam foundation 2018. Best Women farmer award from Ghandi foundation of suryapet, Telangana state.Bio-diversity award from Govt.of.Andhra Pradesh, state Bio-diversity board(2021). Appreciations from Anna university, Tamil nadu. Best women farmer award from Prakasam district farmers association union in the year 2021.

23. Farmers suggestions on extending natural farming to unreached areas : We strongly suggest to have a policy in the govt to appoint special officers and required team to train the farmers showing the videos on cultivation and benefits and profits.

24. Any other information : Presently trying to adopt available precision agriculture low tech tools like soil moisture gauges, temperature sensors, leaf colour code template, Remotely operating weeding, spraying machine, solar power Pump, Remote sensing technology for weather prediction and crop health monitoring. We want to encourage young generation towards Smart Natural Farming

Chilli field preparation for transplantation

Chilli nursery protected by locally available mulching material

Chilli nursery plants ready for transplantation

Chilli Nursery Before transplantation

Chilli plant with Green and ripened pods.

Chilli drying

Dry chilli packing at Warehouse to dispatch to Mumbai.

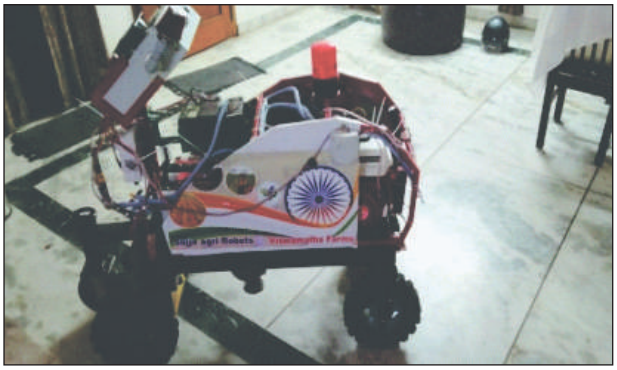
Rain gauge to measure the Rainfall in mm

Direct Marketing with Value addition

Farm products display at Organic trade fair held at Vijayawada Jan 2022

Chilli sowing

Turmeric value addition and packing



Small Remotely operated weeding and spraying machine

Farm pond with rain water

Auto spraying attachment to Tractor.

Farmer in her naturally farmed mango orchard

Desi cows in farmer field

Women farmer with harvested turmeric

Appreciation by Anna university, Tamil nadu.

Press notes of farmer

Felicitations to the farmer

Felicitation by Hon.Vice President Sri. Venkaiah Naidu and AP Agri Ministers.

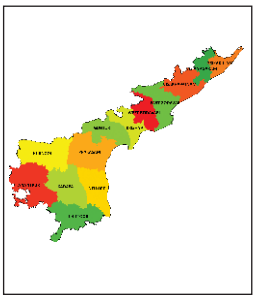
Felicitation by Prakasam district Collector and Local MLA.

On Dias with Former Hon. CM Sri N.Chandra Babu Naidu at AP agritech 2017

Best Women Farmer award by District Farmers union 2021

Various activities done by farmer in her natural farming orchards

Awards and Felicitations



WOMEN LED NATURAL FARMING IN TRIBAL AREAS OF ANDHRA PRADESH

Vanthala Jamuna, Hamsabanda village, Munchinguputtu mandal, Lakshmipuram cluster, Visakhapatnam 9490587895

Submitted by Officials of Department of Agriculture, Munchingiput, Visakhapatnam, Andhra Pradesh

1.	Experience in Natural farming (Years)	:	3 years
2.	Source of information about natural farming	:	Representatives of Rythu Sadhikar Samstha and Sanjeevini Samstha and officials of department of Agriculture
3.	Background information (Crops grown earlier, reason for taking up natural farming etc.)	:	Ragi was cultivated but farmer obtained less yields. Farmer used to sow many seeds at one place due to fear of poor germination. This also increased expenditure on seed. Fertiliser got wasted as it is applied every where in the crop. Later the farmer came to know about cultivation of finger millet in Guli method using Natural farming practices.
4.	Area under natural farming (acres/ha)	:	1 acre
5.	Farming system (rainfed /irrigated / ID (Irrigated dry)	:	Rainfed
6.	Soil type	:	Red soil
7.	crops grown under Natural farming	:	Finger millet
8.	Inputs used		2 kg of jaggery, 2 kg of gram flour, cow dung, urine and liquid manure made of puttamtti (soil of ant hill)
9.	Practices adopted (Seed to harvest)		For the first time in 2019, Mrs. Jamuna cultivated Finger millet crop in this method experimentally. Surprisingly 28 to 39 tillers were found for each plant. For the first time, she obtained 12.2 quintals of Finger millet per acre through this method. In this system, Finger millet and paddy can be cultivated in rainy season. In North Andhra districts, especially in tribal areas, thousands of acres are being cultivated every year. Sloping lands and shallow sandy soils are suitable for growing crops by this method. Deep standing water is not favourable to crop growth of indigenous Finger millet and rice varieties. In summer i.e. in the month of April, dry ploughing was done three times. 5 tonnes of cattle dung or type-2 Ghanajeevamrutham was applied in the last plough. Month of May is suitable for sowing. If sown before rains, weeds will be reduced and crop growth will be good. Small Chodi and Big Chodi are indigenous varieties of Finger millet crop. The indigenous varieties Kuntikulia, Kalamori and Kondagiri should be selected for paddy crop. The seeds were treated with beejamrutam. The soil was leveled before sowing. Lines were drawn at a distance of one foot with the help of ropes or with the help of markers on either side of the field. That is, the distance between the plants should be equal to the distance between the rows.

A hole of about two inches was made in the intersecting points of 2 lines. A little type-1 Ghanajeevamrutham was added in the hole. Then 2-3 seeds (Finger millet or paddy) were placed in the hole and covered with soil. Care was taken not to plant the seeds too deep. If the seeds fall deep in the hole, they will not germinate.

Within a month of germination, the tall seedlings should be derooted and planted in non-sprouted pits. In this way, each hole should have 2-3 sedlings.

In Jamuna method, seeds are sown instead of seedlings. First weeding was done with the help of cycle weeders after 30 days of sowing. It can also be done with labor or with the help of bullocks using dante/gorru. Then weeded twice in an interval of 15 days. After each weeding, 200 liters of dravajeevamrutham was applied per acre @ 100ml/plant

Locally available machines can be used for weeding and for application of dravajeevamrutham. A single machine can weed four rows at once as well as apply dravajeevamrutham to the plants in all four rows (can be pulled by humans without tractor).

Between 15 days to 45 days after germination a wooden log was pulled over tender plants 2-3 times at 15 day intervals. But there is no need to pull the wooden log for rice crop in Jamuna method.

Around the crop, marigold, sorghum and redgram should be planted as cover crops and trap crops.

Plant protection was done with natural farming methods. Decoctions were used only when necessary.

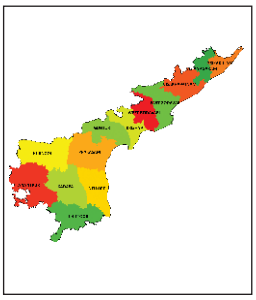
10. Occupation of the respondent : farmer
11. Supporting Institutions / Agency : Representatives of Rythu Sadhikar Samstha and Sanjeevini Samstha and officials of department of Agriculture


Farmer performing various natural farming operations in her crop field

Preparation of natural farming products

Finger millet crop of the farmer

Finger millet crop ready to harvest in farmer field



UNTIRING EFFORTS OF A CHITTOOR FARMER IN NATURAL FARMING

K.Lokanathachari, Pathurnattam Village, Pathurnatram RBK, Baireddipalli Post, Baireddipalli Mandal, Chittoor District, Andhrapradesh, Pin 517415, 9182320280

Submitted by Officials of ATMA, Chitoor, Department of Agriculture, Andhra Pradesh

1. Age of the farmer : 35
2. Education : Inter
3. Experience in Natural farming (years) : 5
4. Sources of information about natural farming : Farmer first came to know about Natural farming in 2017. In his village, AO Hemalatha, PRP Ravichandrasagar, CA Vijayakumari, CRP Venkatalakshmi organized a Gram Sabha and told about nature farming. Since then he is doing Natural farming. Every year he grows rice and vegetables in this farm.
5. Background information (Crops grown earlier, reasons for taking up natural farming : Farmer first cultivated rice under chemical farming. With the inspiration given by Department of Agriculture officials he started Natural farming.
6. Area under natural farming (acres/ha) : 2
7. Farming system (rainfed/irrigated) / ID (Irrigated Dry) : Irrigated
8. Soil type : Black Soil
9. Crops grown under Natural farming : 1.Paddy
10. Details of livestock /poultry/ fisheries/swine etc (if any) : 5 (Desi Cows)
11. Inputs used : Ghanajeevamrutham, Dravajeevamrutham, Kashayalu and Panchagavya
12. Certification details : No
13. Practices adopted (seed to harvest) : After good tillage, rice and vegetables are cultivated following all natural farming practices and inputs
14. Marketing details : No
15. Occupation of the respondent : Farming
16. Supporting Institutions / Agency : Department of Agriculture
17. Challenges in Natural farming and Solutions adopted to overcome them

S.No	Challenges faced in Natural farming	Solutions adopted to overcome
1	Sowing paddy seedlings with labour	Sowing paddy seeds with drum seeder reduced the cost a lot. The rest of the work was done by farmer manually.

18. Subsidies availed : No
19. Comparison between Natural Farming and Conventional Farming

Parameters	Natural Farming (1 ha)	Conventional Farming (1 ha)
Crop	Paddy	Paddy
Cost of cultivation (Rs)	10000	16400

Parameters	Natural Farming (1 ha)	Conventional Farming (1 ha)
Production Q/T/Kg	28 Q	20Q
Gross return(Rs)	54000	38571
Net return (Rs)	44000	22171

20. Benefits and achievements:

Additional income from Intercrops Income

21. Extent of spread to other farmers/ villages : 30
22. Awards/recognition received : No
23. Farmers suggestions on extending natural farming to unreached areas : By giving training, Natural farming can be extended to unreached areas.
24. Any other information- Farmers message : "Doing natural farming like this has given a lot of happiness in my life. Also, I will do my best to tell other farmers in my village to practice natural farming. Also I thank the officials of agriculture department, nature agriculture staff and RYSS who encouraged me by telling me about nature farming. I got better yield and quality crop grown through natural farming than chemical farming"

Land preparation for sowing in paddy field

Sowing paddy with drum seeder

Preparation of natural farming inputs

Crop cutting experiment

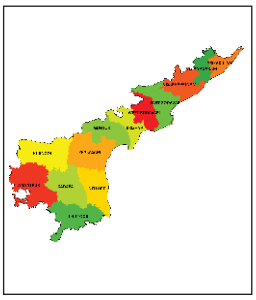
Press notes on farmers success

ప్రకృతి సేద్యంతో అధిక దిగుబడి సాధ్యం

ప్రకృతి వ్యవసాయం వల్ల అధిక దిగుబడి

వ్యవసాయ సంచాలకులు వెంకటేశ్వరులు

ప్రకృతి వ్యవసాయంపై రైతులకు అవగాహన



NATURAL FARMING-A PROVEN TOOL FOR FOOD SECURITY

V Lokanadha Reddy, KadathatlaPalli, Baireddipalli, Chittoor District, Andhra Pradesh 517415, 7995362537

Submitted by Officials of ATMA, Chitoor, Department of Agriculture, Andhra Pradesh

1. Age of the farmer : 60
2. Education : 7th Class
3. Experience in Natural farming (years) : 2 Years
4. Sources of information about natural farming : APCNFP officials
5. Background information (Crops grown earlier, reasons for taking up natural farming etc) : Earlier farmer lived in Bangalore. No crops grown. Started cultivating in 2021. MCRP Shailaja and PRP Ravisagar explained about the importance of nature agriculture in farmer's wife's community meeting. Also, instead of planting only vegetables, they asked farmers to plant banana as the main crop and plant vegetables and greens in it. They said that by doing this, the cost of cultivation of the main crop can be met through income from inter-crops. Thus, the income from the main crop will be completely additional and continuous. Then farmer planted banana as the main crop and 20 types of vegetables, greens and other crops in it as inter-crops.
6. Area under natural farming (acres/ha) : 0.30 hac
7. Farming system (rainfed/irrigated) / ID (Irrigated Dry) : Irrigated dry
8. Soil type : Red soil
9. Crops grown under Natural farming : Banana, Sweet Potato, Chilly, Tomato, Brinjal, Leafy vegetables, Bhendi, beans etc
10. Details of livestock/poultry/ fisheries/swine etc : No
11. Certification details : Nil
12. Inputs used : Ghana jeevamrutam, Beejamrutham, Drava jeevamrutam, Neemastram, Panchagavya, white and yellow plates
13. Practices adopted (seed to harvest) : Same as above
14. Marketing details : Local marketing
15. Occupation of the respondent : Agriculture
16. Supporting Institutions / Agency : RySS
17. Challenges in Natural farming and Solutions adopted to overcome them

S.No	Challenges faced in Natural farming	Solutions adopted to overcome
1	Input Preparation	NPM Shop
2	Pest & Diseases	Kashayams

18. Subsidies availed : No

16. Comparison between Natural Farming and Conventional Farming

Parameters	Natural Farming (1 ha)	Conventional Farming (1 ha)
Crop	Banana and 20 variety's of vegetables	
Cost of cultivation (Rs)	4000	15000
Production Q/T/Kg	1600	1150
Gross return(Rs)	55900	40178
Net return (Rs)	51900	25178

17. Benefits and achievements:
Extra income with 20 kinds of inter crops

18. Extent of spread to other farmers/ villages : 10.00
19. Farmers suggestions on extending natural farming to unreached areas : Farmer did not plough his fields with tractors and bullocks but dig with spades and plant saplings and banana plants so he do not have to spend on ploughing.


Naturally farmed fields of the farmer

Inputs preparation (Drava jeevamrutam) for natural farming

visitors to farmer field

ఈనాడు - చిత్తూరు, పూతలపట్టు

30 సెంట్లు 20 రకాల పంటలు

కుంట నీటితో పంటల సాగు

కదతట్టుపల్లె వద్ద పండించిన వివిధ రకాల పంటలు

రైతేరాజు

బైరెడ్డిపల్లె, న్యూస్‌టుడే: ఎకరాల కొద్దీ పొలం లేదు. ఉన్నది 30 సెంట్లు. సాగు నీటికి బోరు బావి లేదు. యంత్రాలు ఉపయోగించి పంటలు సాగు చేయడానికి ఆర్థిక స్థోమత లేదు. అయినా పంట పండించాలనే ఆశయం వారిని ముందుకు నడిపిస్తోంది. బైరెడ్డిపల్లె మండలం కద

తట్టుపల్లె గ్రామానికి చెందిన దంపతులు రోజారాణిరెడ్డి, లక్ష్మమ్మ కొన్నేళ్లుగా బెంగళూరుకు వలస వెళ్లి గత ఏడాది స్వగ్రామానికి వచ్చారు. వర్షాలు బాగా కురవడంతో వెలువులకు నిండుగా నీరు చేరింది. వెలువ నీటితో పంట పండించాలని తలచారు.

వివిధ రకాల సాగు

ఆలసంద, 5 రకాల ఆకుకూరలు, కొత్తిమీర, సన్నని ఎర్రగడ్డలు, బంతి పూలు, బెండ, గోరుచిక్కుడు, కాకర, టీస్పీ, బీమోటా, పంగ, మిరప, గెనుప గడ్డలు, పాలం చుట్టూ కంచె పంటగా కంది సాగు చేశారు. ప్రకృతి వ్యవసాయ జిల్లా ప్రాజెక్టు మేనేజరు వాసు జీవ ఈ పంటలను, సాగు విధానాన్ని పరిశీలించి అభినందించారు.

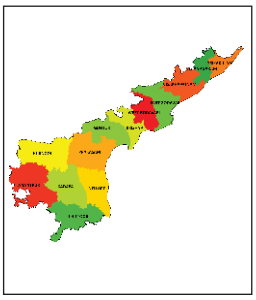
దశల వారీగా ఆదాయం

విభిన్న పంటలు సాగు చేపట్టడంతో దశల వారీగా ఆదాయం వస్తుంది. ఆకుకూరలు సాగు చేస్తే నెల రోజుల్లోనే ఆదాయం సమకూరుతుంది. మూడు దశలుగా ఆకుకూరలు, కొత్తిమీర ద్వారా రూ.10 వేల ఆదాయం లభించింది. బంతిపూలు, సన్నని ఎర్రగడ్డలు, బెండ, గోరు చిక్కుడు పంటల ద్వారా రూ.5 వేల ఆదాయం సమకూరింది. గెనుసుగడ్డ పంట త్వరలో చేతికి రానుంది. గెనుసుగడ్డ బాగా పండటంతో మరో రూ. 20 వేలు ఆదాయం లభించనుంది.

- లక్ష్మమ్మ, కదతట్టుపల్లె

Press note about the farmer

Harvested produce



Success Story in Transforming a Chemical Farm to Natural Farm

Nagaboina Subbarao, Bhendapudi(V), Thondangi(M), Kakinada district, Andhra Pradesh-533406, 9704044202

Submitted by Officials of ATMA, Kakinada, East Godavari District, Department of Agriculture, Andhra Pradesh

1. Age of the farmer : 43
2. Education : 5th Class
3. Experience in Natural farming (years) : 2 Years
4. Sources of information about natural farming : Natural farming staff
5. Background information (Crops grown earlier, reasons for taking up natural farming etc) : Earlier, farmer used to cultivate Paddy, Mango and Coconut crops using chemicals. From the teachings of natural farming staff and observing the fellow farmers doing natural farming learnt that cultivation costs and insects and pests are reduced, the farmer has completely converted to natural farming
6. Area under natural farming (acres/ha) : 3 Acres
7. Farming system (rainfed/irrigated) / ID : Bore well
8. Soil typeRed : Red soil
9. Crops grown under Natural farming : 1.Mango 2.Coconut
10. Details of livestock /poultry / fisheries/swine etc (if any) : Buffalo's 3
11. Certification details : Nil
12. Inputs used : Ghanjeevamrutham, Dhravajeevamrutham and Neemastram, Dasaparni, Sourbutter milk, Onion kashayam, Sapta Dhanyankura kashayam
13. Practices adopted

    PMDS was applied in his land first. Changes in soil are caused by PMDS. Later, onion kashayam was applied to prevent betel leaf in mango field.

    From the second year along with application of PMDS, Ghanjeevamrutham, Dravajeevamrutham and Neemastram, Dasaparni, Sourbutter milk, Sapta Dhanyankura kashayam were used for management of insects and pests.
14. Occupation of the respondent : Farmer
15. Supporting Institutions / Agency : RySS
16. Challenges in Natural farming and Solutions adopted to overcome them

S.No	Challenges faced in Natural farming	Solutions adopted to overcome
1	Weed problem	Weed reduction due to PMDS and mulching
2	Lack of botanical extracts	Availability of botanical extracts in bio input production center solved the problem.

17. Subsidies availed : No

18. Comparison between Natural Farming and Conventional Farming

Parameters	Natural Farming (1 ha)	Conventional Farming (1 ha)
Crop	Mango	Mango
Cost of cultivation (Rs)	38750	80000
Production Q/T/Kg	15Tons	15 Tons
Gross return(Rs)	375000	375000
Net return (Rs)	336250	295000
B C ratio	9.67	4.68

19. Benefits and achievements:

Reduced the cost and pest and diseases, soil become a fertile

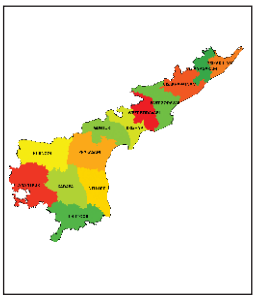
20. Extent of spread to other farmers/villages : By explaining all the neighbouring farmers about the natural farming methods and the benefits of PMDS, and taking the farmers to his field and showing them the crop situation.

21. Awards/recognition received : Awarded as best farmer in natural farming at mandal level

PMDS in Mango field

Preparation of Onion Kashayam

Spraying in farmer field



FERTILE SOILS-HEALTHY FAMILIES: MIRACLES OF NATURAL FARMING

M Venkatasubbaiah, Rachagudipalli Village , OttimittaMandal , YSR Kadapa , Andhra Pradesh, 9390557245

Submitted by Officials of ATMA, Kadapa, Department of Agriculture, Andhra Pradesh

1. Age of the farmer : 37
2. Education : Intermediate.
3. Experience in Natural farming (years) : 5 years in Natural Farming.
4. Sources of information about natural farming : APCNF personnel CA (Cluster Activist), approached the farmer and explained the benefits of the Natural Farming. He tried initially in ½ acre land, later scaled up to 1.25 acres with promising results
5. Background information (Crops grown earlier, reasons for taking up natural farming etc.): : Farmer is a Middle-Class man and is experiencing very poor results with excessive use chemical fertilizers and thought of giving up farming. One day staff of APCNF-RySS conducted a meeting and sensitized farmers by projecting videos of Natural farming which was then tried in 20 cents land and extended it to whole land with promising results. Farmer's family is eating and marketing chemical free produce now
6. Area under natural farming (acres/ha) : 1.25 Acres
7. Farming system (rainfed/irrigated) / ID (Irrigated Dry) : Bore Well
8. Soil type : Red Soil
9. Crops grown under Natural farming : 1.Mango 2. Turmeric 3. Vegetables
10. Details of livestock/poultry/ fisheries/swine etc (if any) : cows:1 poultry,30 goats
11. Certification details : Enrolled in Internal Control System through RySS.
12. Inputs used : Bijamritham, Ghanjeevamritham, Drava Jeevamrita, Neemasthram, Sour Butter Milk, Fish Amino Acid and Agnasthram, etc.
13. Practices adopted (seed to harvest) : Bijamritham, Ghanjeevamritham, Drava Jeevamrita, Neemasthram, Sour Butter Milk, Fish Amino Acid and Agnasthram etc
14. Marketing details : Farmer is marketing the produce with premium price of 20 % compared with regular prices in local markets
15. Occupation of the respondent : Agriculture
16. Supporting Institutions / Agency : AP RySS
17. Challenges in Natural farming and Solutions adopted to overcome them

S.No	Challenges faced in Natural farming	Solutions adopted to overcome
1	Lack of Desi cow	To buy Desi Cow through SHG Loans.
2	No knowledge on cropping pattern.	To take support of Agri Dept Staff
3	Preparation of NF Inputs	Books and Support from Agri Dept and trainings conducted by NF Farmers.

18. Subsidies Availed : No

19. Comparison between Natural Farming and Conventional Farming

Parameters	Natural Farming (1 Acre)	Conventional Farming (1 Acre)
Crop	Turmeric	turmeric
Cost of cultivation (Rs)	42000	45000
Production Q/T/Kg	35 Q	33 Q
Gross return (Rs)	136000	135000
Net return (Rs)	94000	90000
Bc Ratio	2.2	2.0

20. Benefits and achievements : Investment cost became less and farm became fertile and family members health is improved

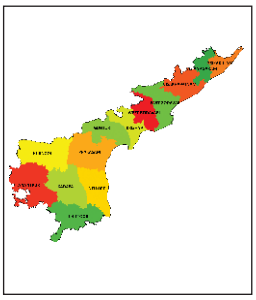
21. Extent of spread to other farmers/ villages : By seeing promising results of this farm, fellow farmers are also adopting Natural Farming methods in their Farms

22. Awards/recognition received : No

23. Farmers suggestions on extending natural farming to unreached areas : Good marketing and pricing may be provided for Natural farming produce

24. Any other information : -

Inputs preparation for natural farming



HARDWORK AND SELF-MOTIVATION ARE THE DRIVERS FOR EXCELLENCE IN NATURAL FARMING

Marupuru Vijayamma, Ammavaripalem village, podalakuru mandal, Nellore, 6281365997

Submitted by Officials of ATMA, Nellore, Department of Agriculture, Andhra Pradesh

1.	Age of the farmer	:	45
2.	Education	:	10th class
3.	Experience in Natural farming (years)	:	3 years
4.	Sources of information about natural farming	:	APCNF Cadres
5.	Background information (Crops grown earlier, reasons for taking up natural farming etc)	:	Paddy. To reduce the cost of cultivation Natural farming was taken up.
6.	Area under natural farming (acres/ha)	:	2.00 acres
7.	Farming system (rainfed/irrigated) / ID (Irrigated Dry)	:	ID(Irrigated Dry)
8.	Soil type:	:	Black soil
9.	Crops grown under Natural farming	:	1. Paddy 2. Pre monsoon dry sowing with 9 varieties of seeds
10.	Details of livestock/ poultry/ fisheries/swine etc (if any)	:	-
11.	Certification details	:	-
12.	Inputs used	:	Beejaamurtham, Neemastram, Ghana jeevamrutham, Drava jeevamrutham, panchagavya.
13.	Practices adopted (seed to harvest	:	1) Seed treatment -Beejamrutham-100lits (1acre -50lits)-paddy seed and seedling are treated with beejamrutham to prevent seed born and soil born diseases 2) Clipping of tips in paddy before transplantation 3) Alley formation in the paddy. 4) Soil fertility - Ghana jeevamrutham-1000kgs -(1acre-400-500kgs), Dhravajeevamrutham -2400lits -(1acre -1200lits) 5) White and yellow sticky traps -12 (1 acre -6-8 traps) -To control sucking pests like white flies, jassids, aphids, trips. 6) Pheromone traps -20(1acre -10)-To attract the male pests 7) Trap crops and border crops
14.	Marketing details	:	Self marketing
15.	Occupation of the respondent	:	Farmer
16.	Supporting Institutions / Agency	:	RySS-APCNF

17. Challenges in Natural farming and Solutions adopted to overcome them

S.No	Challenges faced in Natural farming	Solutions adopted to overcome
1	Stemborer	Pheromone traps
2	Blast	Pedamuthram (Cow dung amruth) inguvadhravanam (Hinge solution) +matedapatham kashayam

18. Subsidies availed : No

19. Comparison between Natural Farming and Conventional Farming

Parameters	Natural Farming (1 Acre)	Conventional Farming (1 Acre)
Crop	Paddy	paddy
Cost of cultivation (Rs)	17000	24000
Production Q/T/Kg	2.860 MTs	2.960 Mts
Gross return(Rs)	60060 (paddy @21/-per kg)	56240(paddy @19/- per kg)
Net return (Rs)	43060	32240
B C ratio	1:3.5	1:2.3

20. Benefits and achievements:

- Cost of cultivation has reduced when compared to chemical farming
- Consuming naturally grown produce
- Observed that crop can withstand adverse climate effects like floods

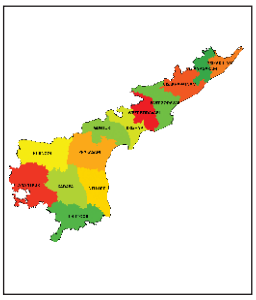
21. Extent of spread to other farmers/ villages : 50 farmers in 50.00 acres in 2 villages

22. Awards/recognition received : Best SHG leader

23. Farmers suggestions on extending natural farming to unreached areas : Field visits, NPM shops for easy availability of NF resources

Transplanting operation in the farmer field

Erection of pheromone traps by the farmer



MOTIVATIONAL STORY OF WOMEN LED NATURAL FARMING

Vaka Madhavi W/o. Srinivasa Reddy,
N.Agraharam(v),Ongole(M), Prakasam (Dt),
Andhra Pradesh, 7569272044

Submitted by Officials of ATMA, Ongole, Prakasam Dist, Department of Agriculture, Andhra Pradesh

1. Age of the farmer : 36 Years
2. Education : Degree
3. Experience in Natural farming (years) : 4Years
4. Sources of information about natural farming : CRP, Palekar training, SHG Groups and trainings by the Agriculture Department
5. Background information (Crops grown earlier, reasons for taking up natural farming etc.) : Bengal gram, Paddy. Natural farming was adopted to improve soil health, to obtain chemical free food by reducing soil, water & air pollution and to reduce cost of cultivation
6. Area under natural farming (acres/ha) : 6 Acres
7. Farming system (rain fed/Irrigated) / ID (Irrigated Dry) : Rain fed
8. Soil type : Black Soil
9. Crops grown under Natural farming : Bengal gram, Paddy
10. Details of livestock/poultry/ fisheries/swine etc. (if any) : Buffalos-5, Cow-1
11. Certification details : Nil
12. Inputs used : Dravajeevaamrutam, Neemaastram, Agniastram, Saptnadhaanyankura Tonic, PMDS Ghanajeevaamrutam, Beejaamrutam, Yellow sticky traps, Pheromone traps
13. Practices adopted (seed to harvest) : PMDS, Seed treatment, Spraying with dravajeevaamrutam 2 times at 15days intervals.

    Spraying with neemaastram, agniastram, saptnadhaanyankura Tonic
14. Marketing details : Sold to TTD devasthanam
15. Occupation of the respondent : Farming, DAAB Member, Natural farming L2 CRP.
16. Supporting Institutions/Agency : Agriculture Department
17. Challenges in Natural farming and Solutions adopted to overcome them

S.No	Challenges faced in Natural farming	Solutions adopted to overcome
1	Preparation of Botanical extracts	Preparing Botanical extracts on her own
2	Marketing problem	-

18. Subsidies availed : Nil

19. Comparison between Natural Farming and Conventional Farming :

Parameters	Natural Farming	Conventional Farming (1 ha)
Crop	Bengal gram	Bengal gram
Cost of cultivation(Rs)	Rs.40,000/-	Rs.53,750/-
Production Q/T/Kg	27.5Q	22.5Q
Gross income(Rs)	Rs.1,54,000 /-	Rs.1,05,750 /-
Net returns	Rs.1,14,000 /-	Rs.52,000 /-
B C ratio	3.85	1.96

20. Benefits and achievements:
Natural farming maintain soil health, gives healthy produce, decrease cost of cultivation and increase net returns

21. Extent of spread to other farmers/ villages : 20 farmers, 25acres
22. Awards/recognition received : Training Certificates - 2
23. Farmers suggestions on extending natural farming to unreached areas : Extend Services through RBK staff and Rythu Sadhikara Samstha
24. Any other information : Nil

Natural farming inputs preparation





Crops under Natural farming


Preparation of liquid formulations for spraying in natural farming field


Organic manures for natural farming

Installation of Pheromone traps in farmer field

Farmer preparing natural farming inputs

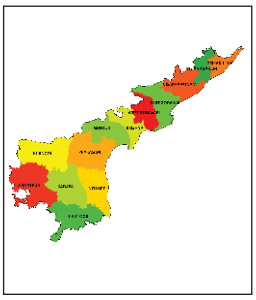
Farmer performing several activities under natural farming

Farmers with natural farming concoctions

Fish amino acid prepared by farmer

Naturally grown Cabbage ready to harvest

Crop cutting experiment



NATURAL FARMING VISION FOR 2025

Kadimi Manemma W/o Kadimi Apparao,
Khandepalli Village, Chodavaram,
Visakhapatnam-531036, 9491918333

Submitted by Officials of Department of Agriculture, Andhra Pradesh

1.	Age of the farmer	:	62
2.	Education	:	8th
3.	Experience in Natural farming (years)	:	14 years
4.	Sources of information about natural farming	:	Agriculture and farmers welfare department (ATMA), books, KVK
5.	Background information (Crops grown earlier, reasons for taking up natural farming etc)	:	● Farmer village mainly depends on Agriculture activities. They mainly grow Paddy, Sugarcane as kharif crop and Pulses, Groundnut and Millets as Rabi crops. ● Every household had cows and they will be getting extra income and also used in farming Without complete knowledge farmer has started natural farming in 2016 by learning from CRP P.Suresh as he insisted to start natural faming in her 0.50 Acres land. ● She followed complete APCNF protocols for one season in that 0.50 Acres of land by then She has observed minimum CB ratio when compared to conventional farming. ● After observing the results in natural farming she had gradually started increasing her land and now she is completely practicing APCNF in 4 acres and motivated neighbour farmers also to practice APCNF
6.	Area under natural farming (acres/ha)	:	4 acres
7.	Farming system (rainfed /irrigated) /ID	:	Irrigation
8.	Soil type		
9.	Crops grown under Natural farming	:	(Kharif): Paddy, Sugarcane (Rabi) : Pulses, Groundnut, Millets, Paddy Variety - RNR 15048
10.	Details of livestock/poultry/ fisheries/swine etc	:	Cows - 3 (2 Jersey 1 Desi Cow) Goats - 4 Hens - 10 Fish Pond (0.15acres)
11.	Certification details	:	-
12.	Inputs used	:	Navadhanya, All natural farming inputs
13.	Practices adopted (seed to harvest)	:	1 st year:- practiced APCNF in paddy with broadcast method. 2 nd year:- practiced APCNF with Navadhanya in paddy with line sowing method. 3 rd year:- practiced APCNF in sugarcane with paired row method. 4 th year:-Raised Fish pond (IFS) in 0.15 cents with APCNF Method. 5 th year:- Farmer is getting extra income by giving Value addition to the products.

14. Marketing details :

15. Occupation of the respondent : Farmer

16. Supporting Institutions/Agency : Required support from NABARD

- Cows:- Gir cows in 2 spells @ Rs 50,000 - each (1st at june-july, 2nd at October-november) Rs 1.00 Lakhs
- Poultry-kadaknath, vanaraja, Giriraja, each 20 chicks(18 female,2 male) @ Rs.200/-each = 60*200 = Rs 12000
- Fish pond-50000 with seed
- Sheep-20 animals (9 female 1male) @ 5000/- each = 50000/-
- Fruit plants and vegetable seeds for field and backyard and vegetable garden Rs.5000/-

** Needed Financial Support (20% subsidy (Rs 43,400/-), 20%marginal money (Rs 43,400/-), 10%Farmers contribution (Rs 21,700/-), 50%Bank loan (Rs 1,08500/-)

17. Subsidies availed :

18. Comparison between Natural Farming and Conventional Farming:

Parameters	Natural Farming	Conventional Farming
Crop	Paddy	Paddy
Variety	MTU1271	MTU1271
CCE (Wet Wt)	21.74 kg	20.12 kg
CCE (Dry Wt)	20.10 Kg	15.05 kg
(1*1)No.of Hills	23	21
No.of Tillers	29	22
Avg No.of Grains per hill	368	228
Test Weight (1000Seeds)	0.40grms	0.36grms
Root Length	10 cm	10cm
Shoot Length	147cm	145cm
Panicle Length	29cm	25cm
Cost of cultivation (Rs.)	24750/-	28200/-
Production (q)	32.56 Q	24.38 Q
MSP (Rs.)	1960 per quintals	1960 per quintals
Gross return(Rs.)+Grass		
(63817+10000)	73817 rs	57785 rs
Net return (Rs.)	49067 rs	29585 rs
CB ratio	1:1.98	1:1.04

Agriculture & Allied Activities

Particulars	Cost of cultivation	Gross income	Net income
Agriculture	24750	73817	49067
Poultry	5000	18000	13000
Cows	24000	96000	72000
Fishery	8000	26000	18000
Sheep and goat	3000	27500	24500
Total	**64750**	**241317**	**176567**

19. Benefits and achievements

* After practicing APCNF with Navadhanya, increased soil fertility and soil health.
* Beneficial insects count increased.
* Farmer is getting extra income by growing intercrops, border crops.
* By growing vegetables in kitchen gardens farmer is fulfilling her basic home needs.
* By developing 5 Layer model she is (365DGC) getting continuous income throughout the year.
* Healthy chemical free food with minimum cost of cultivation.

20. Extent of spread to other farmers/villages : Vision - 2025

- 2016-2022:-In her village 35% of farmers are practicing APCNF.
- 2022-2023:-her vision is to convert 25% of farmers into APCNF.
- 2023-2024:- her vision is to convert 25% of farmers into APCNF.

21. Farmers suggestions on extending natural farming to unreached areas : 2024-2025:- Her vision is to convert 15% of farmers into APCNF.

Desi Cow in Cattleshed

Goats in the Farm

Desi Hens

Line Sowing in Paddy

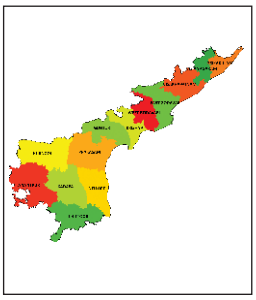
Paired row Method

Jaggery making

CCE in 5*5 Sq.mt

Threshing

Seeds Weighing



NATURAL FARMING: A SUCCESSFUL SAGA IN IMPROVING HEALTH

G. Mastan, Mainampadu(V), Santhanuthalapadu(M), Prakasam(D)
Andhra Pradesh 523225, 9866626285

Submitted by Officials of APCNF, Prakasam District, Department of Agriculture, Andhra Pradesh

1.	Age of the farmer	:	54
2.	Education	:	10th
3.	Experience in Natural farming (Years)	:	2 years
4.	Source of information about natural farming	:	MT. Latha, Officials from APCNF, Mother earth videos, Subhash palekar etc
5.	Background information (Crops grown earlier, reason for taking up natural farming etc.)	:	Farmer and his sister had a farm of 3 acres in the beginning. They cultivated crops using chemical pesticides, which increased cost of cultivation. Inhaling the chemical pesticide while spraying caused lot of illness to us. The younger sister died of cancer in the middle. Apart from that, farmer health was not good and hospital expenses were also high. Sometimes their investment costs were also lost. Farming became a burden to them. At the time when they were thinking of selling the land and stop farming, Andhra Pradesh Community Managed Natural Farming (APCNF) staff came to their village and taught them about benefits of natural farming. In 2018, farmer attended Subhash Palekar's meeting and finally decided to start Natural farming.
6.	Area under natural farming (acres/ha)	:	1.5 acres
7.	Farming system (rainfed /irrigated/ ID (Irrigated dry)	:	Rain fed
8.	Soil type		Black soils
9.	Crops grown under Natural farming		Main crop- Chickpea (Jj11), Intercrop- Mustard, Border crop- Sorghum
10.	Details of livestock /Poultry / Fisheries / Swine etc (if any)	:	1 cow
11.	Certification details	:	-
12.	Inputs used	:	Ghana, Drava, beejaamrut, bramhastram, sour buttermilk, egg lemon juice solution (Solid and liquid elixir and potions)
13.	Practices adopted (Seed to harvest)	:	Cultivation of Chickpea (Jj11), Intercrop- Mustard, Border crop- Sorghum, application of Ghana, Drava, beejaamrut, bramhastram, sour buttermilk, egg lemon juice solution
14.	Marketing details	:	Farmer is supplying his produce to Tirumala Tirupathi Devasthanam (TTD) at 10% higher rate for making Laddu prasad
15.	Occupation of the respondent	:	Farmer
16.	Supporting Institutions / Agency	:	Officials of RYSS-APCNF

17. Challenges in Natural farming and Solutions adopted to overcome them

S.No	Challenges faced in Natural farming	Solutions adopted to overcome
1.	Lack of marketing	This problem can be addressed by creating market avenues for natural farming products and by providing support prices to farmers.
2.	Sow a single crop	Farmers should be made aware of importance of cultivating multiple crops, intercrops, and trap crops.
3.	Not knowing what kind of crops should be taken from the land for 365 days to get income	APCNF officials should guide farmers about crop calendar which is designed according to season
4.	Not knowing the dosage of the potions being used	APCNF officials should guide farmers about this aspect

18. Subsidies availed : Nil

19. Comparison between Natural Farming and Conventional Farming

Parameters	Natural Farming (1 ha)	Conventional Farming (1 ha)
Crop	Chickpea + Mustard+Sorghum	Chickpea
Cost of cultivation (Rs)	19100	27350
Production Q/T/Kg	11q (Chickpea) + 40Kg (Mustard)	6q
Gross return(Rs)	62920+4900+1000=68820	31200
Net return (Rs)	49720	3850
B C ratio	**0.38**	**7.10**

20. Benefits and achievements:

The cost has decreased and the yield has increased

21. Extent of spread to other farmers /villages : Inspired by farmer natural farming system, 5 farmers left chemical farming and started doing natural farming.

22 Awards/recognition received : Nil

23. Farmers suggestions on extending natural farming to unreached areas : Many other farmers can be motivated to take up Natural farming by telecasting the mother soil video showing farming methods followed by ancestors and by reminding them of the excellent health maintained by them by consuming natural farming products and also by highlighting the poor health conditions of the present generation and explaining everyone how the hard-earned money is going towards the hospital expenses. Farmers should be created awareness on profits and cost of cultivation in natural farming.

24. Any other information

Nature farming system reduces cost, soil becomes fertile, farmer can get profit through multiple cropping system. One can earn income by following a single method throughout the year. Having a backyard garden allows us to get the vegetables and greens that we need, this kind of cultivation is healthy. As everyone can't afford to buy cows so it would be greatly helpful if cows are made available.

Sowing in natural farming field

Preparation of Ghanajeevamrut

Preparation of Dravajeevamrut

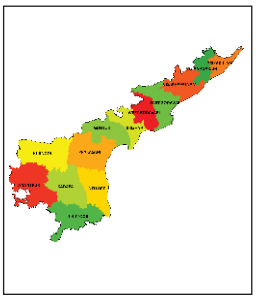
Preparation of Concoctions

Crop cutting experiment

Border crops and inter crops

Intercropping with mustard

Farmer Led Extension



AN EXEMPLARY ANDHRA FARMER TRANSFORMING 144 CHEMICAL FARMERS INTO NATURAL FARMERS

S.Munuswamy, Sripuramdarapuram village, Bhuchireddypalem mandal, SPSR Nellore District, Andhra Pradesh-524305, 9550343586

Submitted by Officials of ATMA, Nellore, Department of Agriculture, Andhra Pradesh

1.	Age of the farmer	:	41
2.	Education	:	10th class
3.	Experience in Natural farming (years)	:	7 years
4.	Sources of information about natural farming	:	APCNF- Field cadre, Palekar training
5.	Background information (Crops grown earlier, reasons for taking up natural farming etc)	:	High cost of cultivation and health issues to the family members led to initiation of Natural farming
6.	Area under natural farming (acres/ha)	:	3 acres
7.	Farming system (rainfed/irrigated) / ID (Irrigated Dry)	:	Irrigated
8.	Soil type	:	Black soil
9.	Crops grown under Natural farming	:	1. Paddy 2. 5 layer model 3. Pre monsoon dry sowing with 9 varieties of the seeds
10.	Details of livestock/poultry/ fisheries/swine etc (if any)	:	Cows: 7, Buffalo : 7 ,Hens : 20
11.	Certification details	:	PGS certificate
12.	Inputs used	:	Ghanajeevamrutham, Drava jeevamrutham, khashayams (dasaparni), panchagavya, sour butter milk, own seed
13.	Practices adopted (seed to harvest)	:	" Seed treatment -Beejamrutham-150 lits (1acre -50lits)-paddy seed and seedlings are treated with Beejamrutham to prevent seed born and soil born diseases. " Clipping of tips in paddy before transplantation. " Alley formation in the paddy. " Soil fertility - Ghanna jeevamrutham-1200 kgs -(1acre-400-500kgs), Dhravajeevamrutham -3600lits -(1acre -1200lits 1200 kgs-(1acre-400-500kgs). " White and yellow sticky traps -18 (1 acre -6-8 traps)-To control sucking pest like white flies,jassids,aphids,trips. " Pheromone traps -30 (1acre -10)-To attack the male pests " Trap crops and border crops
14.	Marketing details	:	Direct marketing to employees and near by people by adding value to paddy.
15.	Occupation of the respondent	:	Presently working as L2 in APCNF
16.	Supporting Institutions / Agency	:	RySS, APCNF

17. Challenges in Natural farming and Solutions adopted to overcome them

S.No	Challenges faced in Natural farming	Solutions adopted to overcome
1	Soil fertility	To improve the soil fertility farmer practiced the pre monsoon dry sowing (PMDS), Ghana Jeevamrutham, Dravajeevamrutham.
2	Pest and diseases	Referred the videos on youtube and palekar training for pest and disease management
3	Marketing	As the employees have awareness on Natural Farming produce benefits he sold processed rice bags for additional price to them

18. Subsidies availed : No

19. Comparison between Natural Farming and Conventional Farming

Parameters	Natural Farming (1 ha)	Conventional Farming (1 ha)
Crop	Paddy	Paddy
Cost of cultivation (Rs)	18000	30000
Production Q/T/Kg	2.580 QT	2.50 QT
Gross return(Rs)	90000	80000
Net return (Rs)	75000	50000
B C ratio	1:5	1:2.6

20. Benefits and achievements:

- Observed difference in Soil
- Cost of cultivation reduced
- Increased income
- High demand to NF products

21. Extent of spread to other farmers/ villages : 144 members in 150.50 acres of land converted into NF with farmer motivation

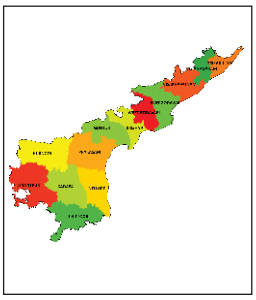
22. Awards/recognition received : No

23. Farmers suggestions on extending natural farming to unreached areas :
    1. First identify natural farming farmers
    2. Increase the marketing facilities
    3. Subsidy for seed
    4. Give awareness on difference between natural farming and chemical farming

24. Any other information : No

Farmer in his healthy grown natural farming crops





CHEMICAL COTTON FIELDS TRANSFORMED INTO NATURAL PULSE LANDS

P Gowtham Reddy , 3/10, Devagudi (V) , Jamalamadugu (M) , Kadapa (D) , Andhra Pradesh (S)516434, 9705961936

Submitted by Officials of ATMA, Kadapa, Department of Agriculture, Andhra Pradesh

1. Age of the farmer : 24
2. Education : Degree
3. Experience in Natural farming (years) : 3 years
4. Sources of information about natural farming : Through ICRPs
5. Background information (Crops grown earlier, reasons for taking up natural farming etc) : Earlier farmer has cultivated Cotton by chemical methods and incurred high costs. Later he got inspired to take up Natural farming as cost of cultivation is very low and results in healthy soil and food
6. Area under natural farming (acres/ha) : 1 acre
7. Farming system (rainfed/irrigated) / ID (Irrigated Dry) : Rainfed
8. Soil type : Black
9. Crops grown under Natural farming : Bengal Gram, PMDS, Soya Bean, Bengal Gram
10. Details of livestock/poultry/ fisheries/swine etc (if any) : 2 cows, 2 ox, buffalo 2, poultry: 30.
11. Certification details : Enrolled in Internal Control System Through APCNF-RySS
12. Inputs used : Bijamritham, Ghanjeevamritham, Drava Jeevamrita,Neemasthram, Sour Butter Milk, Fish Amino Acid and Agnasthram, etc.
13. Practices adopted (seed to harvest) : Seed treatment with beejamuratam, ghanajeevamuratam, Jeevamuratam, neemastram, kashayalu
14. Marketing details : Produce is marketed at local market yard and digitally.
15. Occupation of the respondent : Farmer.
16. Supporting Institutions / Agency : AP RySS
17. Challenges in Natural farming and Solutions adopted to overcome them

S.No	Challenges faced in Natural farming	Solutions adopted to overcome
1	Pricing	Own Digital Marketing
2	Low Yield	Application of Egg Amino Acid and Panchagavya
3	Input Preparations	Through Bio Input Shops

18. Subsidies availed : No
19. Comparison between Natural Farming and Conventional Farming

Parameters	Natural Farming (1 Acre)	Conventional Farming (1 Acre)
Crop	Soya bean	Soya bean
Cost of cultivation (Rs)	32540	35432
Production Q/T/Kg	22 Q	18 Q

Parameters	Natural Farming (1 Acre)	Conventional Farming (1 Acre)
Gross return(Rs)	110000	90000
Net return (Rs)	77460	54568
B C ratio	2.3	1.5

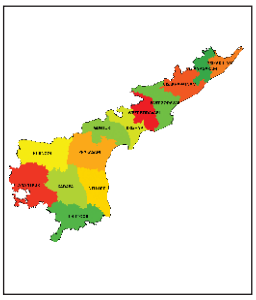
20. Benefits and achievements:
Low cost of cultivation, more income

21. Extent of spread to other farmers/ villages : B Gangireddy / Devagudi, T Ram Pratap / Dermapuram to an extent of 15 acres
22. Awards/recognition received : No
23. Farmers suggestions on extending natural farming to unreached area : Good marketing and price may be assured for NF Produce.


Naturally farmed crops of the farmer


Farmer in his cow shed, cow dung used for farming, preparation of dravajeevamrut


Natural farming products making by farmers group



ENRICHING NATURAL RESOURCES THROUGH NATURAL FARMING

Panuganti Nandhini, Pangili village, Rapur mandal,SPSR Nellore, AP, 8688138938

Submitted by Officials of ATMA, Nellore, Department of Agriculture, Andhra Pradesh

1.	Age of the farmer	:	25
2.	Education	:	Degree
3.	Experience in Natural farming (years)	:	3 years
4.	Sources of information about natural farming	:	Farmer got into natural farming through Dasaiah (Field cadre) and Mallikarjuna (Field cadre)
5.	Background information (Crops grown earlier, reasons for taking up natural farming etc)	:	Earlier cultivated paddy crop with high cost of cultivation. To reduce the costs adopted Natural farming.
6.	Area under natural farming (acres/ha)	:	1.00 acre
7.	Farming system (rainfed/irrigated) / ID (Irrigated Dry)	:	Irrigated
8.	Soil type	:	Red soil
9.	Crops grown under Natural farming	:	1. Paddy 2. Vegetables 3. Pre monsoon dry sowing with 9 varieties of seeds.
10.	Details of livestock/poultry/ fisheries/swine etc	:	Cows, chickens, goats
11.	Certification details	:	No
12.	Inputs used	:	Ganajeevamrutham, dravajeevamrutham, neem powder, neemasthram, vavilaku kashayam, bramhasthram, dhasaparni kashayam,egg amino acid, tonic
13.	Practices adopted (seed to harvest)	:	• Seed treatment -Beejamrutham-50lits (1acre -50lits)-paddy seed and seedlings are treated with beejamrutham to prevent seed born and soil born diseases . • Clipping of tips in paddy before transplantation • Alley formation in the paddy. • Soil fertility - Ghana jeevamrutham-400kgs-(1acre-400-500kgs), Dhravajeevamrutham -1200lits -(1acre -1200lits). • White and yellow sticky traps -6(1 acre -6-8 traps) -To control sucking pests like white flies, jassids, aphids, trips. • Pheromone traps -10(1acre -10)-To attack the male pests • Trap crops and border crops
14.	Marketing details	:	Local marketing
15.	Occupation of the respondent	:	Farmer
16.	Supporting Institutions / Agency	:	RySS-APCNF

17. Challenges in Natural farming and Solutions adopted to overcome them

S.No	Challenges faced in Natural farming	Solutions adopted to overcome
1	During the 1st season, the yield was low compared to fellow farmers.	As she continued to practice natural farming, the yield gradually increased
2	Marketing was difficult in the early days	Farmer personally promoted and marketed natural farming among general public

18. Subsidies availed : No

19. Comparison between Natural Farming and Conventional Farming

Parameters	Natural Farming (1 acre)	Conventional Farming (1 acre)
Crop	Paddy	Paddy
Cost of cultivation (Rs)	16000	22000
Production Q/T/Kg	2.240 MTs	2.400 Mts
Gross return(Rs)	42560(paddy @ 19/- per kg)	40800(paddy @ 17/- per kg)
Net return (Rs)	26560	18800
B C ratio	1:2.66	1:1.85

20. Benefits and achievements:

Higher yields and eating healthier products

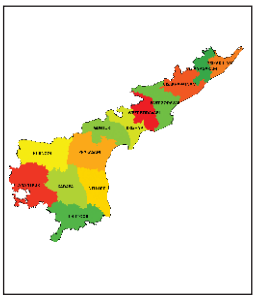
21. Extent of spread to other farmers /villages : 10 farmers converted to natural farming

22. Awards/recognition received : Natural farmer

23. Farmers suggestions on extending natural farming to unreached areas : Through method demonstrations, field visits and campaigning

Naturally grown crops of the farmer

Preparation of dravajeevamrutam and other liquid concoctions by the farmers



GROWING MIXED CROPS IN NATURAL FARMING BRINGS LAURELS

B.Parvathi W/o B.Peddanna, Ghantapuram (V), Potlamarri (GPT), Bathalapalli (M), Dharmavaram subdivision, Sri Satya Sai District, 515661 AP

Submitted by Officials of ATMA, Anantapuramu, Department of Agriculture, Andhra Pradesh

1.	Soil Type	:	Red soil
2.	Extent (in acres)	:	2.00
3.	Date of sowing	:	03.06.2020
4.	No of crops sown	:	21
5.	Main crop	:	Sorghum
6.	Inter crops	:	Sorrel, coriander, spinach, green sorrel, fenugreek and Koyyagura
7.	Mixed crops	:	Pearlmillet, cowpea, greengram, redgram, barnyard millet, til, castor, finger millet ,maize, lab lab bean, mustard, niger, drumstick etc
8.	Total cost of cultivation	:	Rs 8700
9.	Gross returns		Rs 22,875

Field preparation photos

Application of Ghanajeevamrutham in Pre Monsoon Dry Sowing (PMDS) field

Maize stubbles used as mulching material

Seed pellatization of different variety crop seeds

45 days Stage of Crop

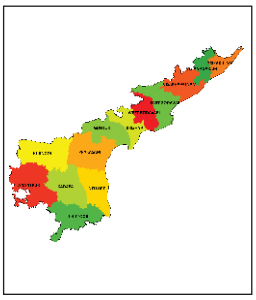
Germination of seeds in PMDS field

60days Stage of PMDS field

Plantation of Fruit plants in PMDS field

More number of cluster beans in PMDS field

Spraying of Jeevamrutham



NATURAL FARMING BRINGS PREMIUM INCOME TO WOMEN FARMER

I. Rajamma, Ranagasamudram, Porumamilla Mandal, YSRDt.Andhra Pradesh, 8106482475

Submitted by Officials of ATMA, Kadapa, Department of Agriculture, Andhra Pradesh

1. Age of the farmer : 42
2. Education : Intermediate
3. Experience in Natural farming (years) : 3 Years
4. Sources of information about natural farming : AP RySS Staff
5. Background information (Crops grown earlier, reasons for taking up natural farming etc) : Farmer was practicing mono cropping in Guava in her field which was infertile and yielded low. RySS MCA Smt Gurramma approached the farmers and explained the benefits of Natural Farming and Poly cropping in orchards and harmful effects of conventional farming. After Practicing NF yields gradually increased.
6. Area under natural farming (acres/ha):. : 1 Acre
7. Farming system (rainfed/irrigated) / ID (Irrigated Dry) : Bore Well
8. Soil type : Red Soil
9. Crops grown under Natural farming : Guava, Leafy Veggies, Vegetables
10. Details of livestock/poultry/ fisheries/swine etc. (if any) : Buffaloes:1, Chicks: 4
11. Certification details: : Enrolled in Internal Control System Through RySS.
12. Inputs used : Bijamritham, Ghanjeevamritham, Drava Jeevamrita, Neemasthram, Sour Butter Milk, Fish Amino Acid and Agnasthram, etc.
12. Practices adopted (seed to harvest) : Bijamritham, Ghanjeevamritham, Drava Jeevamrita, Neemasthram, Sour Butter Milk, Fish Amino Acid and Agnasthram, etc
14. Marketing details : Farmers are Marketing their natural farming produce at a premium price of 20 % high compared to regular prices in local markets
15. Occupation of the respondent : Farming
16. Supporting Institutions / Agency : RySS
17. Challenges in Natural farming and Solutions adopted to overcome them

S.No	Challenges faced in Natural farming	Solutions adopted to overcome
1	Unavailability of Desi cow	To buy Desi Cow through SHG Loans.
2	Cropping Patterns	To take Support of Agri Dept Staff
3	NF inputs Availability	Books and Support from Agri Dept and Trainings Conducted by NF Farmers.

18. Subsidies availed : No

19. Comparison between Natural Farming and Conventional Farming

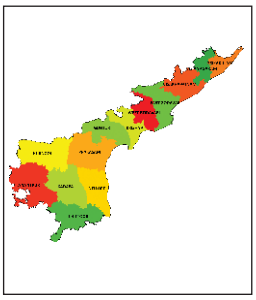
Parameters	Natural Farming (1 ha)	Conventional Farming (1 ha)
Crop	Guava	Guava
Cost of cultivation (Rs)	34000	37000
Production Q/T/Kg	18 Q	15 Q
Gross return (Rs)	95000	92000
Net return (Rs)	61000	55000
B C ratio	1.79	1.4

20. Benefits and achievements:

Investment cost become less and farm became fertile and our family members health is improved.

21. Extent of spread to other farmers /villages : By seeing promising results of natural farming, farm fellow farmers are also adopting Natural Farming methods in their farms.
22. Awards/recognition received : No

Farmer in her naturally farmed field. Other farmers joining the women farmer in preparation of jeevamrutam



INTEGRATED NATURAL FARMING: AN INSPIRING SUCCESS STORY

Siddareddy Sathyanarayana Reddy, Surveypalli, Venkata chalam (MD), SPSR Nellore, AP, 9492336597

Submitted by Officials of ATMA, Nellore, Department of Agriculture, Andhra Pradesh

1.	Age of the farmer	:	55
2.	Education	:	Degree
3.	Experience in Natural farming (years)	:	5 years
4.	Sources of information about natural farming	:	Through Palekhar meeting
5.	Background information (Crops grown earlier, reasons for taking up natural farming etc)	:	Earlier grown Paddy with high Expenditure
6.	Area under natural farming (acres/ha);	:	2.00 acre
7.	Farming system (rainfed/irrigated) / ID (Irrigated Dry)	:	Irrigated Dry
8.	Soil type	:	Red soil
9.	Crops grown under Natural farming	:	1.Paddy 2. Horticultural Crops 3. Pre monsoon dry sowing with 9 varieties of seeds
10.	Details of livestock /poultry / fisheries/swine etc	:	Poultry -120 Livestock; 12
11.	Certification details	:	No
12.	Inputs used	:	Type-2 Ghanajeevamrutham, neemastram, kashayams application, dravajeevamrutham
13.	Practices adopted (seed to harvest)	:	• Seed treatment -Beejamrutham-100lits (1acre -50lits)-paddy seed and seedling are treated with beejamrutham to prevent seed born and soil born diseases. • Clipping of tips in paddy before transplantation • Alley formation in the paddy. • Soil fertility - Ghana jeevamrutham-1000kgs-(1acre-400-500kgs), Dhravajeevamrutham-2400lits (1acre -1200lits). • White and yellow sticky traps -12 (1 acre -6-8 traps) -to control sucking pest like white flies, jassids, aphids, thrips. • Pheromone traps -20 (1acre -10)-To attack the male pests • Trap crops and border crops
14.	Marketing details	:	Local Marketing
15.	Occupation of the respondent	:	Farmer
16.	Supporting Institutions / Agency	:	APCNF Cadre

17. Challenges in Natural farming and Solutions adopted to overcome them

S.No	Challenges faced in Natural farming	Solutions adopted to overcome
1	Input preparation	Hired men for preparation of inputs

18. Subsidies availed : No

19. Comparison between Natural Farming and Conventional Farming

Parameters	Natural Farming (1 acre)	Conventional Farming (1 acre)
Crop	Paddy	Paddy
Cost of cultivation (Rs)	14500	19000
Production Q/T/Kg	1.950 MTs	2.050 Mts
Gross return(Rs)	42900 (paddy @ 22/- per kg)	36900 (paddy @ 18/- per kg)
Net return (Rs)	28400	17900
B C ratio	1:2.95	1:1.94

20. Benefits and achievements:

Good quality produce for health improvement can be obtained

21. Extent of spread to other farmers /villages :

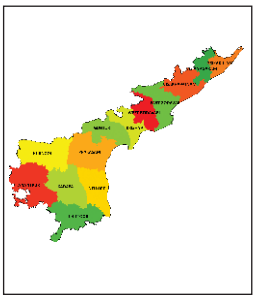
22. Farmers suggestions on extending natural farming to unreached areas : Make ready made inputs available in huge quantities for farmers so that many farmers will come forward to do natural farming

23. Any other information :

Community natural farming farmers meet

Livestock and poultry sheds of farmer

Operations in natural farming performed by the farmers



INTERCROPS YIELDS HIGH IN BANANA FARMED NATURALLY

Smt Saraswathi w/o Sri Gopal Reddy,
Surepallivillage, Kadavakalluunit, PutllurMandal,
Ananthapuramu, 515414.
9553315162,9848888952

Submitted by Officials of ATMA, Anatapuramu, Department of Agriculture, Andhra Pradesh

1. Age of the farmer : 46
2. Education : 10th class
3. Experience in Natural farming (years) : 04(2019)
4. Sources of information about natural farming :
5. Background information (Crops grown earlier, reasons for taking up natural farming etc) : Earlier farmer used to get income only once from her single crop and cost of cultivation is also high but in natural farming inter crops also yielded good income with low cost of cultivation
6. Area under natural farming (acres/ha) : 6 -00 acres
7. Soil type : black soil
8. Crops grown under Natural farming : 1. Banana
   2. Cluster Bean
   3. Cowpea
   4. Marigold
   5. Onion
9. Details of livestock/poultry/ fisheries/swine etc (if any) : Hens 20. Procuring cow dung and urine from nearby temple
10. Certification details : This year she is PGS verification eligibility person
11. Inputs used : Ghanajeevamrutham, dravajeevamrutham, neemastram, Inter crops
12. Practices adopted (seed to harvest) :
13. Occupation of the respondent : Agriculture Natural Farming
14. Supporting Institutions / Agency : AP Govt.Raitu Bharosha ,RySS - APCNF Staff
15. Marketing details : Local marketing
16. Challenges in Natural farming and Solutions adopted to overcome them

S.No	Challenges faced in Natural farming	Solutions adopted to overcome
1	Input Preparation	Own Preparation of Ghanajeevamrutham, dravajeevamrutham, Neemastrhram, Sour Butter milk and mulching.
2	Sikatoga Disease	Natural farming Methods
3	Performance of inter crops in Banana field is doubted	Very good yields and incomes were obtained from Inter crops

17. Subsidies availed :

18. Comparison between Natural Farming and Conventional Farming

Parameters	Natural Farming (2.4 ha)	Conventional Farming (2.4 ha)
Crop	Banana , Cluster Bean, Cowpea, Marigold, Onion	Banana
Cost of cultivation (Rs)	3,15,650	4,78,980
Production Q/T/Kg	165 Tons	129 Tons
Gross return(Rs)	16,75,600	1250,500
Net return (Rs)	1359950	771520
B C ratio	1:4:30	1:1:61

19. Benefits and achievements:
Best net incomes & healthy crops

20. Extent of spread to other farmers/ villages : 65

21. Awards/recognition received : -

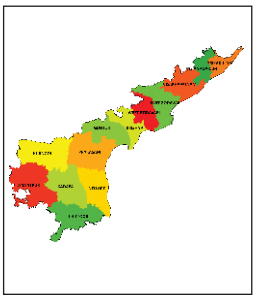
22. Farmers suggestions on extending natural farming to unreached areas :

23. Any other information : Initially doing Natural Farming starting was felt difficult but after realizing the benefits of NF ie good human health and soil health. Farmer who did Natural Farming cannot stop it.

All the village farmers visited farmer's Natural farm. Banana yielded good with good quality, good weight, taste is also very sweet. For this reason all persons came to Saraswati field to buy banana.

Saraswati daughter who is pregnant ate Natural Farming vegetables, leafy vegetables and got normal delivery.

Naturally grown banana in the farmer field



ANDHRA FARMER MARCHING TOWARDS SUCCESSFUL NATURAL FARMING

Yeddu Perayya, Kommanapalli (V), Thondangi (M), Kakinada District, AP, 9666601013

Submitted by Officials of ATMA, East Godavari District, Department of Agriculture, Andhra Pradesh

1.	Age of the farmer	:	45
2.	Experience in Natural farming (years)	:	4 Years
3.	Sources of information about natural farming	:	Learnt about Natural farming from the APCNF cadres and also from the experiences of fellow lead farmers.
4.	Background information (Crops grown earlier, reasons for taking up natural farming etc)	:	Due to indiscriminate use of fertilizers and pesticides this farmer is unable to get even the production expenditure. Later he heard about the APCNF method of crop cultivation and started in the small piece of land. When he experienced the benefits of APCNF methods he extended Natural farming to his 1 acre of land.
5.	Area under natural farming (acres/ha)	:	1 acre
6.	Farming system (rainfed /irrigated) / ID (Irrigated Dry)	:	Bore well
7.	Soil type	:	Black soil
8.	Crops grown under Natural farming	:	Paddy
9.	Details of livestock/poultry/ fisheries/swine etc	:	Desi Cows 2
10.	Certification details	:	No
11.	Inputs used	:	Bheejamrutham, Ghanajeevamrutham, Dhravajeevamrutham, Dasaparni Kashayam, Fish amino acid.
12.	Practices adopted (seed to harvest)	:	• PMDS followed by treating paddy seeds with Beejamrutham. • Incorporated Ghanajeevamrutham - 400 Kgs & Farm Yard Manure- 1200 Kgs. • Soil application of Dravajeevamrutham @ 200 litres for 4times. • Spraying Neemastram- 100 litres@ 2times at 15 days and 25 days after Transplanting. • Spraying dasaparni kashayam - 2.5 litres. • Azolla- 2Kgs • Pheromone traps- 8 • Yellow Sticky traps-10 • Fish amino acid 1/2 litres • Redgram & Marigold on field bunds
13.	Marketing details	:	Produce is sold to the buyers in the field.
14.	Occupation of the respondent	:	Farmer
15.	Supporting Institutions / Agency	:	RySS-APCNF Project

16. Challenges in Natural farming and Solutions adopted to overcome them

S.No	Challenges faced in Natural farming	Solutions adopted to overcome
1	Cost of cultivation has increased in chemical farming.	In natural farming, the cost of cultivation is reduced.
2	Milling: adulteration with other varieties and non-organic rice in large mills.	Processing in small mills and cleaning of chambers before milling.

17. Subsidies availed : No subsidies received

18. Comparison between Natural Farming and Conventional Farming

Parameters	Natural Farming (1 ha)	Conventional Farming (1 ha)
Crop	Guava	Guava
Cost of cultivation (Rs)	34000	37000
Production Q/T/Kg	18 Q	15 Q
Gross return (Rs)	95000	92000
Net return (Rs)	61000	55000
B C ratio	1.79	1.4

19. Benefits and achievements:

- Increase in the yield
- Generating more monthly income by selling rice
- Getting more income through processing and marketing.
- Consumption of chemical free food.
- Reduction in cost of cultivation
- Improvement in Soil health.

20. Extent of spread to other farmers/ villages : Neighbouring farmers visited his fields (10 farmers)

21. Awards/recognition received : No

22. Farmers suggestions on extending natural farming to unreached areas : Provide inputs- kashayams (extracts), growth promotors, traps through NPM shops and bio-input production centre for farmers

23. Any other information : 18 types of PMDS seeds were sown before the main crop. 4500 income was obtained from leafy vegetables and creepers in PMDS and the rest of the crops were incorporated into the soil

PMDS Field

Seeds treated with Beejamrutham

Preparation of Dhravajeevamrutham

MILLETS FLOURISHING THROUGH NATURAL FARMING IN TELANGANA

B.Chakravarthy, Mekavanampally, mominpet mandal, vikarabad District, Telangana, 9849306365
bfaarmz@gmail.com

Documented by Dr. M. Jagan Mohan Reddy, Director EEI

1.	Reasons for taking up the Innovation	:	1. Passion 2. Wishes to provide quality food
2.	Year of implementing the innovation	:	2016
3.	Extent of area in which innovation is implemented by the farmer	:	Cereals, millets, fruit crops, oilseeds and vegetables were cultivated in 200 acres
4.	Sources of information (persons / organizations that helped farmer in starting the initiative)	:	Self
5.	Steps followed in implementing the successful events (Innovation)- People contacted for help, problems faced and solutions implemented.	:	1. PJTSAU 2. birds attack in millets 3. Wrapping cover over panicles
6.	Inputs applied by farmer (Seeds, Fertilizers, Pesticides Etc)	:	-
7.	Finance availed through different sources	:	1. Institutional credit(banks, cooperative societies, NABARD etc) 2. Non institutional credit (friends, neighbours, pvt money lenders etc)
8.	Marketing - Any value addition or processing done by farmer mode of marketing (Online/Physical), any Innovative ways adopted in marketing	:	" Processing of cereals and millets " Physical marketing " App is designed for marketing (FARM Z)
9.	Special efforts made by the farmer for successful implementation of technology	:	" Convincing farmers through his model farm " Doing processing on his own
10.	Economics	:	" Mango-2q/acre; guava- 2.5 q/acre; millets-1 q/acre; rones- 75 kg/ acre
	" Yields/Production		
	" Cost incurred		" Rs.12,500/- per acre & Rs.25 lakhs per annum
	" Gross returns		" Rs.40.00 lakhs
	" Profits		" 75%
	" Others		
11.	Benefits of technology;		
"	Any improvement in income		" Yes
"	Any recognition/respect gained in society		" Yes
"	Any benefits to environment		" Biodiversity conservation
12.	Spread of Technology- To how many farmers and area the technology was spread		To ten farmers, millets and safflower pulses adoption by 15 farmers, vegetable adoption by1 farmer, black rice adoption by 8 farmers

13. Farmer message to entrepreneurs- : Innovativeness and Persistence is needed

Dr M. Jaganmohanreddy, EEI, Director and EEI trainees visit to farmers field

NATURAL FARMING IS THE WAY FORWARD FOR HIGHER INCOMES

Naluwala Sudhakar, Miyapur, Sulthanabad, Peddapalli , Telangana, 9849886034

Submitted by Officials of Peddapalli District, Department of Agriculture, Telangana

1. Age of the farmer : 50 years
2. Education : SSC
3. Experience in Natural Farming (years) : Since 2009 13 yars
4. Sources of Information about natural farming : Grama bharathi, karimnagar
5. Background information (crop grown earlier, reasons for taking up natural farming etc) : Paddy
6. Area under natural farming (acres/ha) : 08 acres
7. Farming System (rainfed/ irrigated) /ID (Irrigated Dry) : Irrigated
8. Soil type : Black soil
10. Crops grown under Natural farming : Paddy, Chillies
11. Details of livestock /poultry/ fisheries /swine etc (if any) : Desi cows & poultry
12. Certification details :
13. Inputs used : Ghana & dhrava jeevamrutham kashayalu, dashapani kashayam
14. Practices adopted (seed to harvest) : Applying ghana & dhrava jeevamrutham manual weeding
15. Marketing Details : Own (self) marketing, selling rice directly to consumers @ Rs.6000/quintal
16. Occupation of the respondent : Agriculture
17. Supporting Institutions /Agency : Agricultural technology management agency (ATMA) by orsanising exposure visits to farmers (natural farmers) fields. Grama bharathi, karimnagar .and agriculture department

18 Challenges in Natural farming and Solutions adopted to overcome them

S.No	Challenges	Solutions
1	Low yields compared to conventional faming	By selling of organic rice directly to consumers at high rates.

19. Comparison between Natural Farming and Conventional Farming

Parameters	Natural Farming (1 ha)	Conventional Farming (1 ha)
Crop: PADDY	Mysore, Mallika	MTU-1010
Cost of cultivation (Rs)	20,000 (manual weeding)	30,000
Production Q/T/Kg	22 qtls/acre	28 qtls/acre
Gross return (Rs)	80,000	50,000
Net return (Rs)	60,000	20,000

20.	Extent of spread to other farmers/ Villages	:	Most of the farmers i.e. the village adopting organic farming , purchased desi cows and spread over to neighboring eligaid and julapalli mandals
21	Awards/recognition received	:	Awards and certificates from grama bharathi, karimnagar
22	Farmers suggestions on extending natural farming to unreached areas	:	Though getting less yields compared to conventional farming , by continuously practicing may get high yields and can also get higher price by direct marketing to identified consumers and through ATMA, Agriculture department and FPOs

Cows used by farmer in natural farming

Preparation of inputs

Natuarlly farmed crop ready to harvest

TAMILNADU NATURAL FARMERS REACH NEW BUYERS WITH A FRESH APPROACH

J. Rajkumar, Ladapuram(E), Perambalur block, Perambalur District, Tamilnadu, 8098975589

Submitted by Officials of SAMETI, Kudumiyanmalai, Pudukottai, Tamilnadu

1.	Age of the farmer	:	44
2.	Education	:	PhD (Botany)
3.	Experience in Natutal Farming (years)	:	3Years
4.	Sources of information about natural farming	:	Integrated Agriculture Extension Centre, Perambalur
5.	Background information(Crops grown earlier, reasons for taking up natural farming etc)	:	He is very much interested in Organic Farming. He came to IAEC. Department officials gave good insight on Natural Farming in which he succeeded.
6.	Area under natural farming (acres/ha)	:	5ac
7.	Farming system (Rainfed/Irrigated) /ID(Irrigated Dry)	:	3ac under dry land, 2ac under irrigated
8.	Soil type	:	well drained loamy &clay soil
9.	Crops grown under Natural farming	:	Onion, Groundnut, Paddy, Varagu, Maize
10.	Details of Livestock/Poultry/ Fisheries/Swine etc(if any)	:	Buffallo-3No's Milchcows-3 No's Poultry-10 No's Goat-12 No's
11.	Certification details	:	Certificate No.ORG/SC/2016/002307
12.	Inputs Used	:	Panchakavya, Meenamilam, Green manures like Daincha, Sunhemp etc.
13.	Practices adopted(seed to harvest)	:	1. Soil testing 2. Application of green manure crops 3. Applied decomposed &enriched FYM 4. Sowing manually 5. Hand weeding 6. Application of Panchakavya 7. Pheromone traps
14.	Marketing details	:	Having own shop
15.	Occupation of the respondent	:	Fulltime Farmer
16.	Supporting Institutions/Agency	:	1. Integrated Agriculture Extension Centre, Perambalur 2. NABARD

17. Challenges in Natural farming and Solutions adopted to overcome them

S.No	Challenges faced in Natural farming	Solutions adopted to overcome
1	Pest & disease problems	overcome by Panchakavya, Dhasakavya
2	Weeds	overcome by mulching
3	lower yield &marketing	No intermediaries-Direct sale of his produce through his own shop

18. Subsidies availed : 1. Seeds bought from IAEC (with subsidy)
2. Bio fertilizes bought from IAEC (with subsidy)
3. Pheromone traps bought from ATMA-Perambalur
4. Technical knowledge & Exposure visit on Organic Farming from ATMA-Perambalur
5. Waiting for loan approval By NABARD

19. Comparison between Natural Farming and Conventional Farming:

Parameters	Natural Farming (1 ha)	Conventional Farming (1 ha)
Crop	Paddy	Paddy
Cost of Cultivation(Rs)	32000	56000
Production (Kg/Ha)	5400	7200
Gross return(Rs)	81000	108000
Net return(Rs)	49000	52000
BC Ratio	1:2.53	1:1.92

20. Benefits and achievements:

1. Natural produces fetch higher price in market
2. Organic paddy is having more nutritional value, cures most of illness in humans
3. Usage of pesticides &herbicides are minimized. So that one can get residue free agriculture products.
4. In case of natural farming, usage of chemical fertilizers are nil, hence soil pollution is prevented.
5. He is cultivating traditional paddy varieties which are rich in vitamins &minerals.

21. Extent of spread to other farmers/ villages : More than 10 farmers are following him & practicing natural farming
22. Awards/Recognition received : no
23. Farmers suggestions on extending natural farming to unreached areas : If marketing facilities are available in nearby areas ,farmers will do natural farming successfully
24. Any other information : Provide more numbers of exposure visits under ATMA scheme.

Input shop of the farmer selling natural farming inputs

FROM POOR PRODUCTIVITY TO BOUNTIFUL HARVESTS: NATURAL FARMING PAYS RICH DIVIDENDS

G.S.Babu S/o Srinivasalu,
Gadavarikandigai,Itchiputhur, Arakonam Block,
Ranipet District, Tamilnadu, 9443965079

Submitted by Officials of SAMETI, Kudumiyanmalai, Pudukottai, Tamilnadu

1. Age of the farmer : 51
2. Education : 10th
3. Experience in Natural farming (years) : 7 Years
4. Sources of information about natural farming : Dept of Agriculture (ATMA) & Dept. of Horticulture
5. Background information (Crops grown earlier, reasons for taking up natural farming etc) :
   - " Providing healthy produces to society
   - " To maintain soil health for future generations
   - " Organic products give higher income
6. Area under natural farming (acres/ha) : 1.0 ac
7. Farming system(rainfed/irrigated) /ID(Irrigated Dry) : Irrigated & Rainfed
8. Soil type : Sandy Loam
9. Crops grown under Natural farming :
   1. Paddy
   2.Groundnut
   3.Bitter gourd
   4.Ridge Gourd
   5.Bottle Gourd
10. Details of livestock/poultry/ fisheries/swine etc (if any) : Cows-5 No's , Poultry -20 No's, Goats-6 No's
11. Certification details : Nil
12. Inputs used : FYM, Vermicompost, Poultry Waste, Fish amino acid, Panchakaviya
13. Practices adopted (seed to harvest) : Seed Treatment with Panchakaviya and Fish amino acid spray for pest and disease control. Using insect repellants
14. Marketing details : Sales at Local market with good returns(Arakkonam)
15. Occupation of the respondent : Farming
16. Supporting Institutions/Agency : ATMA & Horticulture Department
17. Challenges in Natural farming and Solutions adopted to overcome them

S.No	Challenges faced in Natural farming	Solutions adopted to overcome
1	Pest Problem	Using Neem Seed Extract, Vasambu and Fish Acid
2	Disease Problem	Pseudomonas, T-Viridi and Panchakavya Spray
3	Weed and Nutrient deficiency	Hand weeding and Power Weeder operation. Green manure, Green leaf manure and Vermicompost.

18. Subsidies availed : Packing Unit under National Horticultural Mission.

19. Comparison between Natural Farming and Conventional Farming :

Parameters	Natural Farming (1 ha)	Conventional Farming (1 ha)
Crop	Ridge, Bitter and Bottle Gourds (Pandal System)	Ridge, Bitter and Bottle Gourds(Pandal System)
Cost of cultivation(Rs)	32000	46000
Production Q/T/Kg	9500(kg)	13000(Kg)
Gross return(Rs)	57000	78000
Net return (Rs)	25000	32000
B C ratio	1.78	1.69

20. Benefits and achievements:

Attended Organic Farming training given by ATMA officials, they repeatedly insisted Crop rotation, Soil health management by composted cowdung .They also gave demonstration on Organic input preparation like Panchakayva, Amirtakaraisal, Jeevamirtham, Fish amino acid, Herbal insect repellant. Farmer was more impressed in organic farming and decided to cultivate Paddy, Pulses and Vegetables. Gourds plant grew better & got more yield without usage of chemicals & also got more profit in the market

21. Extent of spread to other farmers/ villages : 20 Farmers following above technology

22. Awards/recognition received : Nil

23. Farmers suggestions on extending natural farming to unreached areas :
- " Village Farmer Service centers as the nucleus for knowledge sharing input sourcing, etc.
- " Model farms in village level and model villages at block levels
- " KVKs to develop and handhold at least one village as Model Natural Farming unit

28. Any other information : Organic Farming helps in protecting the environment globally

Farmer in his naturally grown vegetable field

Organic Farming Training at Mandya, Karnataka

ATMA Demo on Mulching Sheet

NATURAL FARMING, THE SUCCESS MANTRA FOR SUSTAINABLE FARM INCOME

S.Shanmugaraman, S/o V.T.Sivaprakasam, No:34 Pillayar kovil Street, Vegamangalam Village, Sirukarumbur (P.O) Kaveripakkam Block, Ranipet (Dt)-632503, 9486594151

Submitted by Officials of SAMETI, Kudumiyanmalai, Pudukottai, Tamilnadu

1. Age of the farmer : 50
2. Education : DME
3. Experience in Natural farming (years) : 14 years
4. Sources of information about natural farming : Agriculture and farmers welfare department (ATMA), books, KVK
5. Background information (Crops grown earlier, reasons for taking up natural farming etc) : Organic Products give higher Income
   Interest in Natural Farming
6. Area under natural farming (acres/ha) : 6 acres
7. Farming system (rainfed/irrigated) /ID : Irrigated
8. Soil type : Sandy Loam
9. Crops grown under Natural farming : 1 .Paddy
   2. Groundnut
   3. Pulses
   4. Coconut
10. Details of livestock/poultry/ fisheries/swine etc : Cow-8 No's.
11. Certification details :
12. Inputs used : FYM, Vermicomposting, Amirthakaraisal, Solar light trap, Panchakaviya, & Bio Fertilizers
13. Practices adopted (seed to harvest) : Both SRI Method and Seed Drill method were adopted in his lands (he has developed seed drum), Manual Harvest, Cono weeder
14. Marketing details : Sold to 15 pre booked local customers
15 Occupation of the respondent : Progressive Farmer
16. Supporting Institutions/Agency : ATMA and KVK Virunjipuram

17. Challenges in Natural farming and Solutions adopted to overcome them

S.No	Challenges faced in Natural farming	Solutions adopted to overcome
1	Pest Problem	Using Neem seed extract and Dhasagavya
2	Disease Problem	Panjakavya Spray
3	Weed and Nutrient Problem	Used cono weeder to control weed and to increase tiller development
4	Marketing: Gestation period in selling of processed rice	Managing through money reserves

18. Subsidies availed : Solar Light Trap

19. Comparison between Natural Farming and Conventional Farming:

Parameters	Natural Farming (1 ha)	Conventional Farming (1 ha)
Crop	Paddy	Paddy
Cost of cultivation(Rs)	25,000	40,000
Production (Kg/Ha)	3,750 kg	6,050
Gross return(Rs)	130,000	127,050
Net return (Rs)	105,000	87,050
B C ratio	1:5.2	1:3.17

20. Benefits and achievements:

Based on the guidance from ATMA staff of agriculture department he was impressed in organic farming and decided to cultivate paddy by natural method with wider spacing of 20cm x 20cm. Finally the crop grew better & got more yield without usage of any chemicals & also got more profit in the market

21. Extent of spread to other farmers/ villages : 20 farmers are following above technology

22. Awards/recognition received : Nil

23. Farmers suggestions on extending natural farming to unreached areas :
- " Development of trained extension and implementation cadre at different levels - state, district, and cluster
- " Village Farmer Service centers as the nucleus for knowledge sharing input sourcing, etc.
- " Model farms in village level and model villages at block levels
- " KVKs to develop and handhold at least one village as Model Natural Farming unit and the agriculture universities to handhold at least 500 farmers

Raised Bed Nursery for SRI method of Paddy cultivation

Sowing with Paddy Drum Seeder developed by farmer

WOMEN FARMERS OF TAMILNADU: SOURCES OF INSPIRATION FOR CULTIVATING TRADITIONAL PADDY UNDER NATURAL FARMING

B.Lakshmi Devi, 18, Yamunainadhi street,
Maragathambigai Nagar,Ambasamudram -627401.
Tirunelveli District, 9443081066

Submitted by Officials of SAMETI, Kudumiyanmalai, Pudukottai, Tamilnadu

1.	Age of the farmer	:	63
2.	Education	:	B.Sc. (Chemistry)
3.	Experience in Natural farming (Years)	:	5 Years
4.	Source of information about natural farming	:	Personal efforts and participation in the ATMA Training.
5.	Background information (Crops grown earlier, reason for taking up natural farming etc.)	:	" For the first 7 years she cultivated and harvested hybrids and varieties of paddy seeds (JCP, Andhraponni, ASD-16, CO&TPS). " Later (from five years) she is cultivating traditional varieties such as Atturkichadi samba, Mappilai samba, and Poongar by purchasing it from Tanjore " Farmer has passion towards organic farming since childhood
6.	Area under natural farming (acres/ha)	:	6 acres of wetland
7.	Farming system (rainfed /irrigated / ID (Irrigated dry)	:	Irrigated wetland
8.	Soil type	:	Silt clay loam
9.	Crops grown under Natural farming	:	She is cultivating more than 35 traditional paddy varieties in her 6 acres of land.
10.	Details of livestock /Poultry / Fisheries / Swine etc (if any)	:	She possesses 6 cows and 5 calves.
11.	Certification details	:	-
12.	Inputs used	:	Used Jeevaamirtham, Panchakaviya and Amirthakaraisal, Used power weeder for weeding No chemical /fertilizer/ pesticides are used.
13.	Practices adopted (Seed to harvest)	:	" Multi cereal sowing for soil enrichment (Nammalvar method). " Insitu application of Green manure seeds, SRI method of planting " Used Jeevaamirtham, Panchakaviya and Amirthakaraisal, Used power weeder for weeding " No chemical /fertilizer/ pesticides are used.
14.	Marketing details	:	She has distributed 50 kg of different traditional varieties to more than 100 farmers and maintains seed bank.
15.	Occupation of the respondent	:	She was a graduate who was working as senior section supervisor for BSNL and has taken voluntary retirement from service in 2010. Since then she became a full time farmer
16.	Supporting Institutions / Agency	:	Agriculture Department One of the Beneficiaries of the ATMA Scheme.

17. Challenges in Natural farming and Solutions adopted to overcome them

S.No	Challenges faced in Natural farming	Solutions adopted to overcome
1.	Initially yield is less	Patience
2.	Criticism from other farmer	Neighbour farmers complained about the foul smell of Natural inputs
3.	Labour Availability	Used power weeder and transplanter to overcome labour problem
4.	Marketing	Become a member in Tirunelveli organic farmer group and got a shop at Tirunelveli corporation

18. Subsidies availed : Nil

19. Comparison between Natural farming and conventional farming

Parameters	Natural Farming (1 ha)	Conventional Farming (1 ha)
Crop	Paddy	Paddy
Cost of cultivation (Rs.)	Rs.47,500	Rs.60,000
Production Q / T / Kg	4862 Kg	5600 Kg
Gross return (Rs.)	Rs.1,94,480	Rs.1,68,000
Net return (Rs.)	Rs.1,46,980	Rs.1,08,000
B C ratio	4.09	2.8

20. Benefits and Achievements :

Cultivated about 30 varieties of traditional paddy for seed multiplication.

Conserving valuable genetic resources by cultivation and preservation of traditional varieties through organic farming.

She motivates other farmers to go for organic farming. She is one of the resource person in organic farming training

21. Award / recognition received :

1. Vocational Excellence Award from rotary Ambasamudram for Organic farming.
2. Received Rs 10,000/- Cash prize by ATMA for best organic farming on 24.02.2021
3. Awarded 'Bharatha Rathna Dr.M.G.RParampariya NelPathukavalarvirudu'by Tamil Nadu Chief Minister Thiru. M.K.Stalin on 8th March 2022 for high yield in traditional variety AthurKichili Samba 3rd prize cash award of Rs.50,000/- also.
4. Awarded Nammalvarvirudu by 'Agni Siragugalkalvi and Dharma Arakattalai' Thirukarukavuron 07.05.2022 and received the same from Minister for School Education of Tamil NaduThiru.Anbil Mahesh Poyyamozhi.

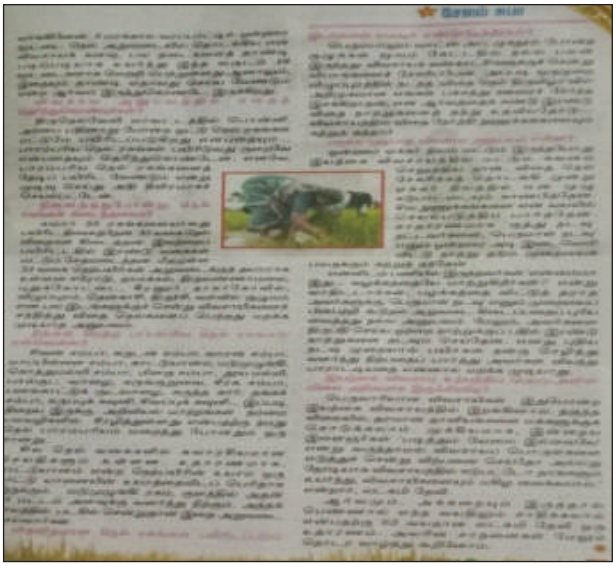
- Article published in Dhinamani magazine under the heading "Nesippom, Pathukappom",dated 18.8.2021
- Article published in 'Devi' magazine under the heading "VithaiNelleValkai, VivasayameSwasam"

  Dated: 08.03.2022.
- Article published in"PasumaiVikadan" under the heading "ParampariyaNelVilachalPottiyinVettriyalargal" Dated: 10.04.2022.

22. Extent of spread to other farmers / villages :
- Agriculture Students of Killikulam Agriculture College and Thangaplalm Agriculture College have visited her field and gained knowledge about traditional paddy seeds.
- She is a role model to other farmers.
- Created awareness among farmers of Ambasamudram block about Organic Farming and Traditional Paddy varieties.
- She has distributed 50 kg different traditional varieties to more than 100 farmers and maintain seed bank

23. Farmers suggestions on extending natural farming to unreached areas : More awareness programmes and village level training to be organized to extend Natural Farming to unreached areas

Press notes of the women farmer



VILLAGE LEVEL NATURAL MODEL FARM NEED OF THE HOUR

Ganesan S/O Vengatesan, Katharikuppam, Walaja Block, Ranipet (Dt), Tamilnadu-632405 , 6381533990

Submitted by Officials of SAMETI, Kudumiyanmalai, Pudukottai, Tamilnadu

1. Age of the farmer : 37
2. Education : HSC
3. Experience in Natural farming (years) : 1 Year
4. Sources of information about natural farming : Agriculture Department (ATMA)
5. Background information
   - Crops grown earlier : Paddy
   - Reasons for taking up natural farming : He switched to organic farming because he is aware of its benefits
6. Area under natural farming (acres/ha) : 1.0 ac
7. Farming system(rainfed/irrigated)/ : Irrigated
8. Soil type : Clay Loam
9. Crops grown under Natural farming : 1. Paddy
   2. Groundnut
10. Details of livestock/poultry/ fisheries/swine : Cow-3 No's , Poultry -8 No's,
11. Certification details : Nil
12. Inputs used : Green leaf manure, FYM, Vermicompost, Bio-Fertilizers, Amirthakaraisal, Panchakaviya, conoweeder, poochchu virati, light trap, yellow sticky trap, and pheramone trap.
13. Practices adopted (seed to harvest) : Applied green leaf manure, FYM, Seed Treatment with Bio-Fertilizers, Amirthagaraisal spray, Panchakaviya Spray, Using Conoweeder to control weeds, Azolla Cultivation. poochu virati spray, using light trap, yellow sticky trap and pheromone trap for controlling pest.
14. Marketing details : Selling in local market
15. Occupation of the respondent : Farmer
16. Supporting Institutions/Agency : APAC College, KVK Virunjipuram & ATMA
17. Challenges in Natural farming and Solutions adopted to overcome them

S.No	Challenges faced in Natural farming	Solutions adopted to overcome
1	Pest Problem	Using Neem Seed Extract, poochi virati spray, using light trap, yellow sticky trap and pheromone trap for controlling pest.
2	Disease Problem	Bio pesticides Spray prepared from the farm.
3	Weed and Nutrient Problem	Used conoweeder to control weed and increasing tiller development, Amirthagaraisal spray, Panchakavya Spray, Meen amilam spray

18. Subsidies availed : Seed and Sprayer.

19. Comparison between Natural Farming and Conventional Farming :

Parameters	Natural Farming (1 ac)	Conventional Farming (1 ac)
Crop	Paddy	Paddy
Cost of cultivation(Rs)	18000	20000
Production Q/T/Kg	1960 kg	2100 kg
Gross return(Rs)	60000	42000
Net return (Rs)	42000	22000
B C ratio	3.33	2.1

20. Benefits and achievements:

Farmer is living at Katharikuppam village, Walaja block for the past 15 years he is cultivating conventional method of Paddy & oilseeds but he did not get more profit in this method and also he met labour problem & more Pest & Disease attack and less profit. At that time he attended Natural Farming trainings and interested in cultivating paddy under natural farming.

By adopting Natural method of cultivation, paddy plant grew better & got more yield without any usage of chemicals & also got more profit in the market.

21. Extent of spread to other farmers/villages12 farmers are following above technology in near by villages

22. Awards/recognition received : Nil

23. Farmers suggestions on extending natural farming to unreached areas :
- ✓ Village Farmer Service centers as the nucleus for knowledge sharing input sourcing, etc.
- ✓ Model farms in village level and model villages at block levels
- ✓ KVKs to develop and handhold at least one village as Model Natural Farming unit.

Farmers meeting on Natural farming

Women farmers in naturally farmed paddy field

SWITCHING TO NATURAL FAMING IN VEGETABLES BOOSTS INCOME FOR KERALA WOMEN FARMERS

Geetha N Village-Palode, block-Vamanapuram, District-Thiruvanathapuram, State-Kerala- 695547, 9846582697

Submitted by Officials of Organic Farming Cell, Directorate of Agriculture, Kerala

1. Age of the farmer : 54
2. Education : S.S.L.C
3. Experience in Natural farming (years) : 27
4. Sources of information about natural farming : Krishibhavan
5. Background information (Crops grown earlier, reasons for taking up natural farming etc) :
6. Area under natural farming (acres/ha) : 112 cent
7. Farming system (rainfed/irrigated) / ID (Irrigated Dry) : Rainfed, irrigated
8. Soil type : Laterite soil
9. Crops grown under Natural farming :
   1. Vegetables
   2. Banana
   3. Ginger
   4. Turmeric
10. Details of livestock/poultry/ fisheries/swine etc : livestock
11. Certification details : Not yet received
12. Inputs used: Cowdung, neemoil, Ghana Jeevamrutham, DravaJeevamrutham, Panchagavya
13. Practices adopted (seed to harvest): After land preparation, application of Lime /dolomite is done. After sowing mulching is done using Harithakashayam residue and glyricidia. She mainly uses vermicompost and harithakashayam at 4 leaf stage. For controlling pest and disease she is using Harithakashayam spray. Jeevamrutham is applied twice in a week
14. Marketing details : Local market
15. Occupation of the respondent : Agriculture
16. Supporting Institutions / Agency : Krishibhavan
17. Challenges in Natural farming and Solutions adopted to overcome them

S.No	Challenges faced in Natural farming	Solutions adopted to overcome
1	Pest attack	Trap crop is used

18. Subsidies availed : Krishibhavan

19. Comparison between Natural Farming and Conventional Farming

Parameters	Natural Farming (1 ha)	Conventional Farming (1 ha)
Crop	Vegetables	Vegetables
Cost of cultivation (Rs)	50000	70000\
Production Q/T/Kg	2500kg	3000
Gross return(Rs)	100000	75000
Net return (Rs)	100000	75000
B C ratio	2	1.07

20. Benefits and achievements:
More income from organic farming

21. Awards/recognition received : Her plot is maintained as model plot of organic farming block panchayath

22. Farmers suggestions on extending natural farming to unreached areas : by extending organic farming practice we can produce safe to eat vegetables though this we can introduce our own branded organic produce

23. Any other information : Nil

Women farmer in vegetable nursery

Women farmer performing activities in her farm and making notes

Cows used for natural farming

Naturally grown snake gourd ready to harvest

Farmer in her ready to harvest natural crop

SPREADING THE BENEFITS OF NATURAL FARMING THROUGH KRISHIP ADASHALA IN KERALA

Narayanankutty K, Madathil (H), Valoringal Punnappala (PO), Pin: 679328,Kerala, 9072365635

Submitted by Officials of Organic Farming Cell, Directorate of Agriculture, Kerala

1. Age of the farmer : 68
2. Education : B.com
3. Experience in Natural farming (years) : 5 years
4. Sources of information about natural farming : Indigenous knowledge and technical support from agricultural department
5. Background information (Crops grown earlier, reasons for taking up natural farming etc) : Paddy, Coconut
   Reasons for shift:
   For a better life
6. Area under natural farming (acres/ha) : 4.5 acres
7. Farming system (rainfed/irrigated) / ID (Irrigated Dry) : Irrigated
8. Soil type : Laterite
9. Crops grown under Natural farming :
   1. Paddy
   2. Banana
   3. Coconut
   4. Vegetables
   5. Fruit plants
10. Details of livestock/poultry/ fisheries/swine etc : 17
11. Certification details : NIL
12. Inputs used : Jeevamrutha, WOC, Trichoderma enriched cowdung
13. Practices adopted (seed to harvest) : Seed treatment, trap crops, natural enemy
14. Marketing details : Local market and online
15. Occupation of the respondent : Farmer
16. Supporting Institutions / Agency : Agricultural department
17. Challenges in Natural farming and Solutions adopted to overcome them

S.No	Challenges faced in Natural farming	Solutions adopted to overcome
1	Production was low	-
2	Pest and Diseases	Trap crops, natural enemy

18. Subsidies availed : 35000/- (Rupees thirty five thousand only)
19. Comparison between Natural Farming and Conventional Farming

Parameters	Natural Farming (1 ha)	Conventional Farming (1 ha)
Crop	paddy	paddy
Cost of cultivation (Rs)	40,000/-	35,000/-

Parameters	Natural Farming (1 ha)	Conventional Farming (1 ha)
Production Q/T/Kg	1250 kg	1750 kg
Gross return(Rs)	112, 500/-	95,000/-
Net return (Rs)	72,500/-	60,000/-
B C ratio	1.81	1.71

20. Benefits and achievements:

Good health and fertile soil is the great achievement

21. Extent of spread to other farmers/ villages : conducted krishipadashala for 50 farmers
22. Awards/recognition received :
23. Farmers suggestions on extending natural farming to unreached areas : Farm school, success model plot field visits

Farmer in his cow shed. Cow products used for natural farming

Farmer in his naturally grown crop field

Grow bags used by farmer

Natural farming products

ADOPTION OF NATURAL FARMING: A STEP TOWARDS ECONOMIC PROSPERITY FOR KERALA FARMERS

Deepan Venu, Elampalloor, Eravipuram, Kollam, Kerala 691501, 7025461109

Submitted by Officials of Organic Farming Cell, Directorate of Agriculture, Kerala

1.	Age of the farmer	:	39
2.	Education	:	BA(English)
3.	Experience in Natural farming (years)	:	06
4.	Sources of information about natural farming	:	Books, MG University, experienced farmers
5.	Background information (Crops grown earlier, reasons for taking up natural farming etc)	:	To retain sustainability, soil health, to maintain natural eco system
6.	Area under natural farming (acres/ha)	:	2 acres
7.	Farming system (rainfed/irrigated) / ID (Irrigated Dry	:	Irrigated
8.	Soil type	:	Laterite
9.	Crops grown under Natural farming	:	1. Vegetables 2. Banana 3. Tubers 4. Spices
10.	Details of livestock/poultry / fisheries /swine etc	:	Cows (2), Goat (5), poultry (25)
11.	Certification details	:	in progress
12.	Inputs used	:	Jeevamruth, Panjagaviya, cow dung Slurry, Cows urine, Harithakashayam, compost
13.	Practices adopted (seed to harvest)	:	Natural mulching, seed treatment (Virus free seedlings) Maintaining soil health (Jeevamiruth application on every 15 days interval, panjagaviya application at 3 months interval, compost application every 6 months. Harithakashayam treatment at various stages of the crop, Kaduthrayadiyogam used as pesticide, Punarnava rasathikashayam to prevent diseases
14.	Marketing details	:	Direct selling & market under krishibhavan
15.	Occupation of the respondent	:	nil
16.	Supporting Institutions / Agency	:	Krishibhavan, KVK & MG University

17. Challenges in Natural farming and Solutions adopted to overcome them

S.No	Challenges faced in Natural farming	Solutions adopted to overcome
1	Pest & Diseases	Adopted Kaduthrayadiyogam used as pesticide, Punarnava rasathikashayam to prevent diseases. Soil solarisation and seed treatment

S.No	Challenges faced in Natural farming	Solutions adopted to overcome
2	Marketing	Not individual marketing system for Organic products and lack of knowledge from the part of consumers.

18. Subsidies availed : BPKP Scheme(Organic Mannure production), Garden Tiller and Brush cutter Under SMAM , IFS under ATMA, Rainshelter under Vegetable Development programme, vegetable cultivation and fallow under janakeeyasoothranam

19. Comparison between Natural Farming and Conventional Farming

Parameters	Natural Farming (1 ha)	Conventional Farming (1 ha)
Crop	Bhindi	bhindi
Cost of cultivation (Rs)	1.8 Lakhs	2.5 lakhs
Production Q/T/Kg	8 Mts/ha	7.5Mts / ha
Gross return(Rs)	4 Lakhs	3.75 lakhs
Net return (Rs)	2.20 Lakhs	1 lakhs
B C ratio	2.2	1.5

20. Benefits and achievements:

Selected as Block Level Resource person and FIG Convener Under BPKP

21. Extent of spread to other farmers/ villages : Work as a resource person at panchayath, block & District level, and also Sharing knowledge to farmers through state level whatsaap groups(Integrated Organic Farmers Association)

22. Awards/recognition received : Panchayath and Block Level award for Best Organic farmer, District level Award, awarded by Federal Bank, 3 Local Awards.

23. Farmers suggestions on extending natural farming to unreached areas : Promote BPKP scheme like Farmers awareness programmes

Preparation of panchagavyam & jeevamrutham

NATURAL FARMING: A PURSUIT OF PROFIT

Jacob Mathew Mangalathil, Koodaranhi, Kozhikode Dt. Kerala 673603, 9656041090

Submitted by Officials of Organic Farming Cell, Directorate of Agriculture, Kerala

1. Age of the farmer : 44
2. Education : Plus Two
3. Experience in Natural farming (years) : 8 years
4. Sources of information about natural farming : 30 days training programme conducted by the Lifelong learning department, Calicut University, Kerala.
5. Background information (Crops grown earlier, reasons for taking up natural farming etc) : Coconut, Arecanut, Cocoa, Nutmeg, Pepper and Coffee
6. Area under natural farming (acres/ha) : 3.5 acres
7. Farming system(rainfed/irrigated) /ID(Irrigated Dry) : Irrigated
8. Soil type : Laterite
9. Crops grown under Natural farming : 1.Coconut
   2.Arecanut
   3.Nutmeg, Pepper
   4.Coffee
10. Details of livestock/poultry/ fisheries/swine etc(if any) : Cow 3 nos, poultry 5 nos.
11. Certification details : Nil
12. Inputs used : Jeevamrutham, poultry manure, farmyard manure and compost
13. Practices adopted(seed to harvest) : zero or minimal tillage, mulching, periodic manure application, irrigation, plant residue composting
14. Marketing details : local marketing
15. Occupation of the respondent : full time Agriculture
16. Supporting Institutions/Agency : Krishibhavan Koodaranhi Kozhikode
17. Challenges in Natural farming and Solutions adopted to overcome them

S.No	Challenges faced in Natural farming	Solutions adopted to overcome
1	Pest and diseases control during high humid season	Pseudomonas and other homestead preparations
2	Low market Price	Market support needed
3	Transportation cost as the plot is situated in hilly area	-

18. Subsidies availed in various schemes under the state and central schemes : Nil

19. Comparison between Natural Farming and Conventional Farming

Parameters	Natural Farming (1 ha)	Conventional Farming (1 ha)
Crop	Coconut	Coconut
Cost of cultivation (Rs)	More than conventional 9000+ labour	18000+ labour
Production Q/T/Kg	90 nuts per palm per year	Production varies as season changes
Gross return(Rs)	94000	82000
Net return (Rs)	42000	37000

20. Benefits and achievements:

1. Healthy and productive soil, steady plant growth and
2. More income as compared to conventional method

21. Extent of spread to other farmers/ villages : Small number of farmers

22. Awards/recognition received : Sarojini Damodar Foundation Cash award and ATMA Koduvally block panchayat best Farmer award 2021

23. Farmers suggestions on extending natural farming to unreached areas : If proper marketing facilities available especially in local, it is much better


Farmer in his natural farm

Farmer showing pepper performance

Nursery with shade net

Poultry of the farmer

Livestock with the farmer

AN INSPIRATIONAL STORY OF A TEACHER IN THE PATH OF NATURAL FARMING

Kurian M J, Maliyil (H) Pindimana P.O, Kothamangalam, Ernakulam, Kerala 686691, 9447667503

Submitted by Officials of Organic Farming Cell, Directorate of Agriculture, Kerala

1.	Age of the farmer	:	68
2.	Education	:	BSc, B.Ed
3.	Experience in Natural farming (years)	:	13 Years
4.	Sources of information about natural farming	:	Department of Agriculture
5.	Background information (Crops grown earlier, reasons for taking up natural farming etc.)		
6.	Area under natural farming (acres/ha)	:	1 acre
7.	Farming system (rainfed/irrigated) / ID (Irrigated Dry)	:	Rainfed irrigation
8.	Soil type	:	Laterite soil
9.	Crops grown under Natural farming	:	1. Bottle gourd 2. Cowpea 3. Chilly 4. Snake gourd 5. Cucumber 6. Bhendi
10.	Details of livestock/poultry/ fisheries/swine etc (if any)	:	
11.	Certification details	:	Certification process ongoing
12.	Inputs used	:	Cow dung , poultry manure, ground nut cake, Neem cake, goat manure, Bone-Meal
13.	Practices adopted (seed to harvest)	:	Mulching, application of Jeevamritham, fish amino acid, other bulky and concentrated organic manures, application of Vrikashayurvedha products, Botanical Extract etc
14.	Marketing details	:	Local market
15.	Occupation of the respondent	:	Retired teacher
16.	Supporting Institutions / Agency	:	Krishibhavan, Gramapanchayath, Service Cooperative Bank

17. Challenges in Natural farming and Solutions adopted to overcome them

S.No	Challenges faced in Natural farming	Solutions adopted to overcome
1	Pest & Disease attack	Adopting different pheromone traps
2	High Cultivation cost	Modern Machineries

18. Subsidies availed : PKVY, RKVY, BPKP, State organic Schemes, other LSGD Schemes

19. Cost Economics in Natural Farming

Parameters	Natural Farming (1 ha)
Crop	Vegetable
Cost of cultivation (Rs)	70000/-
Production Q/T/Kg	12 ton
Gross return(Rs)	160000
Net return (Rs)	90000
B C ratio	1.28

20. Benefits and achievements:

Natural farming is a tool for sustainable agriculture since it protects nature. It yields Quality products. As food is medicine - so one can eat healthy food and share it to others, continuous organic farming also improve soil health, decrease incidence of pest and diseases, conserve Agro ecology

21. Extent of spread to other farmers/ villages :
22. Awards/recognition received : Best organic farmer award at block and panchayath level
23. Farmers suggestions on extending natural farming to unreached areas : Support as per cultivation cost, need special sales counters for organic farming products

Farmer doing operations in pandal grown vegetables

KERALA'S INNOVATIVE NATURAL FARMING PRACTICES IN VEGETABLES CREEPING OVER WATER BODIES

Udayakumar K P, Puthenveetil, Mahadevikadu, Karthikappally, Haripad, Alappuzha Kerala 686503, 9847210948

Submitted by Officials of Organic Farming Cell, Directorate of Agriculture, Kerala

1.	Age of the farmer	:	58
2.	Education	:	7th Std
3	Experience in Natural farming (years)	:	15years
4.	Sources of information about natural farming	:	From other farmers experience (Hariharan, Arookutty), Training classes, Farmer exchange, KVK, Agriculture ,Department, Krishibhavan, own farming experience.
5.	Background information (Crops grown earlier, reasons for taking up natural farming etc	:	Excessive use of chemical fertilizer reduces soil fertility resulting in pollution of soil, water and air. Hence taken up Natural farming to mitigate effects of chemical farming.
6.	Area under natural farming (acres/ha)	:	2 acres
7.	Farming system (rainfed/irrigated) / ID (Irrigated Dry)	:	Irrigated, Rainfed
8.	Soil type	:	Sandy loam and clayey soil
9.	Crops grown under Natural farming	:	1. Salad cucumber 2. Bitter guard 3. Snake guard 4. Cowpea 5. Nithyavazhuthana 6. Amaranthus
10.	Details of livestock/poultry/ fisheries/swine etc. (if any)	:	• Cow (Krishna 1Nos, Kazargod dwarf 2Nos) • Goat 4Nos (Gemna pyari) • Fish (Karimeen 20 Hive)
11.	Certification details	:	Nil
12.	Inputs used	:	Cow dung, Poultry waste, Neem cake, Fish amino acid, Trichoderma enriched cow dung, Pseudomonas, cow dung slurry etc
13.	Practices adopted (seed to harvest)	:	• Solarization of farming area. • Lime Application. • Formation of ridges at 4 feet width and 1 feet height. • Application of Farm Yard/ Organic Manure, Cow dung slurry, Cow's Urine, Pseudomonas and other bio inputs as basal dose and once in 15 days after planting of seeds/seedlings. • Biopesticide application (Fish amino acid, Jeevamrutham, Haritha Kashayam) once in two weeks/ as and when need arises. • Biocontrol Agents (Pesticides) - Bevaria and Verticillium are also applied.

- Use of yellow card, Cue lure traps, Pheromone traps in pandal varieties.
- Farming practice of this farmer is a special one. Because the pandal varieties are mainly planted in the bunds of a water logged area and canopy of the crops is trailed above the water bodies.

14. Marketing details : Open market, Ecoshop.
15 Occupation of the respondent : Agriculture
16. Supporting Institutions / Agency : Krishibhavan, Ecoshop, Entemannu Gramina Karshakasangham, Karshaka
17. Challenges in Natural farming and Solutions adopted to overcome them

S.No	Challenges faced in Natural farming	Solutions adopted to overcome
1	Deficit of good quality water for irrigation.	1. Facilitate fresh water source for good irrigation.
2	In certain circumstances Pest and disease outbreak adversely affects crop production.	2. Adoption of prophylactic use of organic pesticides and other organic inputs.
3	Less market value of organic inputs	3. Collection of farmers organic produce and marketing in a centralized manner to ensure better price.

18. Subsidies availed : VDP schemes, ATMA, LSGD projects.
19. Comparison between Natural Farming and Conventional Farming

Parameters	Natural Farming (1 ha)	Conventional Farming (1 ha)
Crop	Cowpea	Cowpea
Cost of cultivation (Rs)	6000/-	9000/-
Production Q/T/Kg	210kg	280kg
Gross return(Rs)	10500/-	14000/-
Net return (Rs)	4500/-	5000/-
B C ratio	1.33	1.8

20. Benefits and achievements:

a) Producing eco-friendly edible vegetables

b) Natural cultivation is not harmful to our society and encourages production of safe to eat vegetables

21. Extent of spread to other farmers/ villages : The farmer has conducted training programmes to farmers in the block regarding successful organic vegetable cultivation. He has requested more training programmes from the universities and department.
22. Awards/recognition received : Received second prize of Best Vegetable farmer in Alappuzha District during 2021-22 from Agriculture Department
23. Farmers suggestions on extending natural farming to unreached areas : Trainings and Demonstration required from Universities and Department.



Farmer and his family performing natural farming activities through aquatic routes




Ready to harvest natural farming produce


Live stock maintained by farmer for natural farming







Naturally farmed crops ready to harvest


Awards and felicitations to the farmer

FAMILY FARMING, THE BEST WAY OF CULTIVATING CROPS NATURALLY

Manuel C G, Chakkalakkal, Padinharathara, Wyanad,kerala-673575, 9744307900

Submitted by Officials of Organic Farming Cell, Directorate of Agriculture, Kerala

1. Age of the farmer : 63
2. Education : SSLC
3. Experience in Natural farming (years) : 35 Yrs
4. Sources of information about natural farming : Trainings conducted by Agri department
5. Background information (Crops grown earlier, reasons) : Coffee, Pepper, Tubers, Vegetables, Banana Reasons for taking up Natural Farming

   Improving soil health, ensures better health, environment conservation, improve yield etc
6. Area under natural farming (acres/ha) : 2.5 Acre
7. Farming system (rainfed/irrigated) / ID : Irrigated
8. Soil type : Laterite
9. Crops grown under Natural farming : Vegetables, Banana, Coffee, Pepper
10. Details of livestock/poultry/ fisheries/swine etc : Cow-6, Poultry-20, Fisheries-1000
11. Certification details : In farm (Organic Wayanad)
12. Inputs used : Cow Dung, Organic Preparations, Neem Cake, Fish aminoacid, vermicompost
13. Practices adopted (seed to harvest) : Green leaf mulching, Panjagavya, vermin Compost, Fish amino acid
14. Marketing details : Open Market, VFPCK
15. Occupation of the respondent : Farmer
16. Supporting Institutions / Agency : VFPCK, ATMA, Infarm
17. Challenges in Natural farming and Solutions adopted to overcome them

S.No	Challenges faced in Natural farming	Solutions adopted to overcome
1	Production costs are higher because farmers need more workers	Family Farming
2	Marketing and distribution is not efficient because organic food is produced in smaller amounts.	Integrated Farming
3	Organic farms have to go through tough certification processes	Organic certified by Indocert
4	The crops are easily susceptible to illness that may slow down production.	Bio pesticides , Bio inputs

18. Subsidies availed : Sericulture, ATMA, VDP

19. Comparison between Natural Farming and Conventional Farming

Parameters	Natural Farming (1 ha)	Conventional Farming (1 ha)
Crop	Banana, vegetables, pepper, arecanut	Banana, rice
Cost of cultivation (Rs)	40000	240000

20. Benefits and achievements : Food without poison, Healthy eating habits ,good soil health, less costly, good market price

21. Extent of spread to other farmers/ villages : moderate
22. Awards/recognition received : VFPCK, VDP, Fisheries, Sericulture
23. Farmers suggestions on extending natural farming to unreached areas : Need more marketing and storage facility


Farmer with his naturally grown crops

Livestock for natural farming

Farm pond of the farmer

Poultry used for natural farming

INSPIRING EXPERIENCES OF KANNADA FARMER IN SHIFTING FROM TOBACCO CULTIVATION TO NATURAL FARMING

Suprith s/o late Narayanagowda, Adaguru village, Ambalare post, Haranalli hobli, Periyapatna Taluk, Mysore District, Karnataka State 571102. 9535695808

Submitted by Officials of Department of Horticulture, Government of Karnataka

1.	Age of the farmer	:	38
2.	Education	:	S S L C
3.	Experience in Natural farming (years)	:	15 Years
4.	Sources of information about natural farming	:	Natural farming field demonstrations in local areas, study tour conducted by Agriculture and horticulture department to inter-state and inter-district, visiting KVKs and extension departments and finally progressive farmers field visits & field demonstrations
5.	Background information (Crops grown earlier, reasons for taking up natural farming etc)	:	Tobacco crop is the major commercial crop grown in earlier years and now under Natural farming integrated horticulture, agriculture and forestry crops are grown to improve the soil fertility and health condition
6.	Area under natural farming (acres/ha)	:	12 acres
7.	Farming system (rainfed/irrigated) / ID (Irrigated Dry)	:	Irrigated
8.	Soil type	:	Red sandy soil ,Black loamy soil,
9.	Crops grown under Natural farming	:	Horticulture, agriculture and forestry crops
10.	Details of livestock/poultry/ fisheries/swine etc (if any)	:	Farm pond, Fish pond, natural poultry farm, Animal husbandry etc.
11.	Certification details	:	-
12.	Inputs used	:	Natural cow dung, manure, compost, vermicompost, green manure crops, panchagavya, jeevamrutha, neemcake etc.
13.	Practices adopted (seed to harvest)	:	Seed treatment, application of natural cow dung, manure, compost, vermicompost, green manure crops, panchagavya, jeevamrutha, neemcake etc.
14.	Marketing details	:	Marketed in local and distant markets. Art of living Ravishankar guruji banglore, savayava sahaja samrudha bengaluru konanakunte cross, bhoomi organics banglore vasanta nagara, Subhiksha group mangalore
15.	Occupation of the respondent	:	Natural farming farmer
16.	Supporting Institutions / Agency	:	Agriculture and horticulture departments, Forestry department, Fishery department, Veterinary department, KVKs and extension

17. Challenges in Natural farming and Solutions adopted to overcome them

S.No	Challenges faced in Natural farming	Solutions adopted to overcome
1	Slow growth	Creations of awareness,
2	Low yield	Adopt and learn new technologies
3	Marketing problems, high input costs, lack of awareness	Creation of separate market for natural farming products

18. Subsidies availed : Subsidy under PMKSY for drip irrigation for banana crop, Vegetables, Subsidy for farm pond in NHM Scheme, Subsidy for tobacco alternative crops like vegetables & subsidy for banana crops under CHD Scheme.

19. Comparison between Natural Farming and Conventional Farming

Parameters	Natural Farming (1 ha)	Conventional Farming (1 ha)
Crop	Banana	Banana
Cost of cultivation (Rs)	1,50,000.00	1,00,000.00
Production Q/T/Kg	50 tonnes/Ha	60 tonnes/Ha
Gross return(Rs)	6,00,000.00	7,00,000.00
Net return (Rs)	4,50,000.00	6,00,000.00
B C ratio	3:1	4:1

20. Benefits and achievements:

1. Ensure better health of consumer
2. Rejuvenate the soil health and control environmental pollution

21. Extent of spread to other farmers/ villages : Sri dore s/o kullegowda (K basavanahalli), Krishnamurty s/o shyamanna(Kanagal), Padmamma w/o karigowda (K basavanahalli), Mahesh urs s/o Raje urs (Doddabelalu).

22. Awards/recognition received : Progressive farmer awards at Taluk level and District level.

Krishi Ratna award from Art of living banglore

Pragatipara Raita from Infosys founder Narayanamutry

avayava pragatipara krushi raita from kannada sahitya sammelana periyapatna taluk

Savayava krushika from dharmastala kshetra abhiruddi

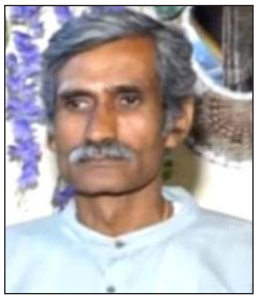
23. Farmers suggestions on extending natural farming to unreached areas : Provide information about natural farming by natural farming field demonstrations. study tour from Agriculture and horticulture department for inter state and inter-district, visiting kvk's and extension departments and finally progressive farmers field visit & field demonstration



Farmer in his natural farm preparing inputs

NATURAL FARMING CHANGING THE FARMERS FORTUNE IN COCONUT

A S Mahesh, Ammanaghatta Village, Ammanaghatta Post, Kasaba Hobli, Gubbi Taluk. Tumkur District, Karnataka State- 572216, +91-9108907673



Submitted by Officials of Department of Horticulture, Government of Karnataka

1. Age of the farmer : 52
2. Education : SSLC
3. Experience in Natural farming (years) : 15 Years
4. Sources of information about natural farming : KVK Hirehalli, Subash Palekar Methods of farming, Narayan Reddy method of farming.
5. Background information (Crops grown earlier, reasons for taking up natural farming etc) : Earlier farmer cultivated coconut under chemical farming. Shifted to natural farming to reduce chemical usage. Natural farming is low maintenance, chemical free and maintains soil in good health.
6. Area under natural farming (acres/ha) : 5 acre
7. Farming system (rainfed/irrigated) / ID (Irrigated Dry) : Irrigated
8. Soil type : Red soil
9. Crops grown under Natural farming : 1. Coconut
   2. Arecanut
   3. Banana
   4. Cardamom
   5. Pepper
   6. Coffee
   7. Mango etc
10. Details of livestock/poultry/ fisheries/swine etc (if any) : 3 local cows
11. Certification details : No
12. Inputs used : Jeevamrutha
13. Practices adopted (seed to harvest) : No cultivation, Spraying Jeevamrutha
14. Marketing details : 50% of the produce is sold directly to consumer and remaining is marketed through APMC
15. Occupation of the respondent : Agriculture
16. Supporting Institutions / Agency : No
17. Challenges in Natural farming and Solutions adopted to overcome them

S.No	Challenges faced in Natural farming	Solutions adopted to overcome
1	Low yields	Applied organic fertilizers, jeevamrutha, Beejamrutha

18. Subsidies availed : NHM AEP for Black Pepper

19. Comparison between Natural Farming and Conventional Farming

Parameters	Natural Farming (1 ha)	Conventional Farming (1 ha)
Crop	Coconut	Coconut
Cost of cultivation (Rs)	0	50000-00
Production Q/T/Kg	56 Q	20 Q
Gross return(Rs)	412000-00	281000-00
Net return (Rs)	41000-00	75000-00
B C ratio	9.55	2.66

20. Benefits and achievements:

Zero Maintenance, Chemical Free, Systemic Utilization of Land and Water.

21. Extent of spread to other farmers/ villages : Gowripura, Chikkanayanakanahalli Villages

22. Awards/recognition received : District Award from UAS bangalore, from UHS Bagalkote, Bhoomi Network Fellowship Award from Karnataka sarvodaya

23. Farmers suggestions on extending natural farming to unreached areas : Supply of bio agents for controlling diseases, etc

24. Any other information : Given training to the students from agri and horticulture university during Training Programme in every year.

Farmer demonstrating visitors on dravajeevamrut preparation

Visitors to farmer natural farming field

Farmer to farmer extension

Farmer training school children on Natural farming

Farmer training youth on Natural farming

FARMER TO FARMER EXTENSION IN NATURAL FARMING

Raveesh L. S/O Linganna, Doddahosur, Honnudike, Gulur Hobli, Tumkur Taluk and district Karnataka 571104, 9900414891

Submitted by Officials of Department of Horticulture, Government of Karnataka

1. Age of the farmer : 44
2. Education : ITI
3. Experience in Natural farming (years) : 10 years
4. Sources of information about natural farming : Natural Farming Group-Tumkur
5. Background information (Crops grown earlier) : Coconut, Mango, Arecanut.

   Reasons for taking up natural farming: The farmer adopted natural farming to save the crops from scarcity of water caused due to uneven rainfall.
6. Area under natural farming (acres/ha) : 5 acres
7. Farming system (rainfed/irrigated) / ID (Irrigated Dry) : All the three types
8. Soil type : Red and sandy loamy soil
9. Crops grown under Natural farming :
   1. Arecanut intercropped with black pepper, cocoa, cardamom, turmeric, tapioca,
   2. Coconut intercropped with drumstick, numerous fruit crops, turmeric, tuber crops
   3. Mango along with 50 different forest species
10. Details of livestock/ poultry/ fisheries/swine etc : Yes, the farmer practices dairy farming and poultry rearing
11. Certification details : Nil
12. Inputs used : Organic liquids
13. Practices adopted (seed to harvest) : The farmer grows mainly fruit and plantation crops so he focuses on processing of cocoa, cashew and black pepper.
14. Marketing details : Marketing is done through the outlets owned by 'Natural Farming Group-Tumkur' in Kengeri, Nelamangala of Bengaluru, Tumkur and Shimoga.
15. Occupation of the respondent : Agriculture and Business (Hardware shop)
16. Supporting Institutions / Agency : Department of Horticulture
17. Challenges in Natural farming and Solutions adopted to overcome them

S.No	Challenges faced in Natural farming	Solutions adopted to overcome
1	Water scarcity	Mulching (dead and live mulch), farm pond, drip irrigation
2	Heavy rains	Providing adequate drainage
3	Pest and disease	Spraying Panchagavya, solutions with leaf extract, bhimastra, agniastra, fish meal

18. Subsidies availed: Subsidy for drip irrigation and farm pond from Department of Horticulture.

19. Comparison between Natural Farming and Conventional Farming

Parameters	Natural Farming (1 ha)	Conventional Farming (1 ha)
Crop	Intercropping of coconut/ arecanut/mango with different plantation and forest species	Monocropping of coconut/ arecanut/ mango

20.Benefits and achievements.

Increase in soil organic carbon (upto 1.5), soil fertility, normal pH maintenance, conserving soil moisture.

21. Extent of spread to other farmers/ villages : About 100 farmers from Tumkur and around 70 from Madhugiri taluk are influenced by natural farming and also from other states like Andhra Pradesh, Maharashtra, Karnataka, Tamil Nadu and Kerala

22. Awards/recognition received : Krishi Pandit Award from Karnataka State Department of Agriculture, Dr. M. H. Marigowda state level award, Uttama Jenu Krishika award for Apiculture from Department of Horticulture, Lalbagh

23. Farmers suggestions on extending natural farming to unreached areas : The farmer suggests to go for natural farming on a community basis as it requires the effort of a community in spreading knowledge and importance of natural farming. Also, trainings regarding natural farming is important.

24. Any other information : The farmer runs a Gandhi Sahaja Besaya Ashram in his farm to provide trainings (4 to 6 months) to beginners





Various crops cultivated by farmer naturally with Coconut, Mango and Arecanut


Farmer giving awareness to other villagers on natural farming practices

LEARNINGS FROM NATURAL FARMING

Narendra S/o Nagshetty, Chalkpur Tq: Bhalki Dist: Bidar Karnataka 585414, 9448815555

Submitted by Officials of Department of Horticulture, Karnataka

1. Age of the farmer : 40
2. Education : LLM Education
3. Experience in Natural farming (years) : 4-5Years experience
4. Sources of information about natural farming : Through online
5. Background information (Crops grown earlier, reasons for taking up natural farming etc) :
6. Area under natural farming (acres/ha) : 5 Acre
7. Farming system (rainfed/irrigated) / ID (Irrigated Dry) : Irrigated
8. Soil type : Black cotton
9. Crops grown under Natural farming : Vegetables, Sugar cane
10. Details of livestock/poultry / fisheries/swine etc (if any) : Deoni cow 21
11. Certification details : Certification under process
12. Inputs used : Cow waste material and grow krapambrut and panchagavya
13. Practices adopted (seed to harvest) :
14. Marketing details : Market in local
15. Occupation of the respondent : Advocate and agriculture
16. Supporting Institutions / Agency : No supporting Institutions
17. Subsidies availed : No Subsidies availed
18. Comparison between Natural Farming and Conventional Farming

Parameters	Natural Farming (1 ha)	Conventional Farming (1 ha)
Crop Tomato	1 (20000)	40000
Cost of cultivation (Rs)	10	4000
Production Q/T/Kg	5q	25q
Gross return(Rs)	No Returns	30000
Net return (Rs)	1000	4

19. **Benefits and achievements** : Health and quality
20. Extent of spread to other farmers/ villages : To 5 farmers
21. Awards/recognition received : No Awards

Naturally farmed field of shri Narendra farmer

NATURAL FARMING, THE SUCCESS MANTRA FOR SUSTAINABLE FARM INCOME

BhanudasraoVenkatrao Patil, At post Aknapur village, Tq: Kamalnagar, Dist: Bidar , Karnataka 585326 , 9731952274

Submitted by Officials of Department of Horticulture, Karnataka

1. Age of the farmer : 70
2. Education : Graduate B.A
3. Experience in Natural farming (years) : 16Year
4. Sources of information about natural farming : Horticulture office Aurad and Bidar
5. Background information (Crops grown earlier, reasons for taking up natural farming etc) : Sandal wood Farming, Custard Apple Farming, Sericulture Farming and Cow Farm
6. Area under natural farming (acres/ha) : 20 acres
7. Farming system (rain fed/irrigated) / ID (Irrigated Dry) : Irrigated
8. Soil type : Black
9. Crops grown under Natural farming :
   1. Sandalwood
   2. Custard Apple
   3. Sericulture
   4. Guava
10. Details of livestock/poultry/ fisheries/swine etc : Cow Farming
11. Certification details :
12. Inputs used :
13. Practices adopted (seed to harvest) :
14. Marketing details : Open Market
15. Occupation of the respondent : Farmer
16. Supporting Institutions / Agency : Horticulture office Aurad, F.P.O farmer production organization
17. Challenges in Natural farming and Solutions adopted to overcome them

S.No	Challenges faced in Natural farming	Solutions adopted to overcome
1	Some time heavy rain water logging occur	Field bunding is done
2	Drought	Organic mulching done
3	Wild animal problem	Fencing is done

18.Subsidies availed: Ayush mission Scheme (2 ha) Amount 84628 From SADH office Aurad

19.Comparison between Natural Farming and Conventional Farming

Parameters	Natural Farming (1 ha)	Conventional Farming (1 ha)
Crop	Sandal wood	Sandal wood
Cost of cultivation (Rs)	40000/-	80000/-

20. Benefits and achievements
21. Extent of spread to other farmers/ villages : Muthkhed and Chondimukhed
22. Awards/recognition received : Vijay Karnataka "Smart Rait" Award
23. Farmers suggestions on extending natural farming to unreached areas : Low expenditure in natural farming so that poor people will do natural farming

Farmer in his naturally grown orchard crops


School children visiting natural farm of the farmer


Crops grown under natural farming