

Pomegranate: a Crop for Doubling Farmers Income - Success Stories of Farmers

Indian Council on Agricultural Research
National Research Centre on Pomegranate
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PREFACE

Pomegranate (*Punica granatum* L.) can be considered as one of the most ideal crops for dry Deccan Plateau region of India.

The versatile adaptability to a wide range of climatic and edaphic conditions, hardy nature, low water requirement, good response to high-tech horticultural practices, high yield, good returns on investment in dry regions, excellent therapeutic values, huge demand for table and processed products and great export potential has made pomegranate a popular fruit of semi-arid, tropical, subtropical regions in recent times.



India is the global leader in pomegranate acreage and production. As per Indian Horticulture Database, 2016-17, an area 2.16 lakh ha is under pomegranate cultivation with an estimated production of 2613 thousand MT and productivity of 12.1 t/ha. Major contribution is from Maharashtra with almost 66 % share in national acreage and production.




Great part of the credit to this enhanced production and productivity goes to the pomegranate farmers of this country, who are working tirelessly in order to find best option for high returns to meet the growing expenditure for agriculture and maintaining satisfactory economic status of the family.




In order to recognize the hard work of the most respected farming community engaged in pomegranate cultivation and to exemplify the role of pomegranate cultivation in improving economic status of the farmer NRCP visited farmers to collect their stories and the most illustrious stories along with the technology being followed by the farmer have been published in this E-publication on the occasion of Fourteenth Foundation Day of ICAR-NRCP, Solapur.




Jyotsana Sharma
Director (Acting)



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Export oriented pomegranate production	
Personal profile	
Name	Shri. Ravindra Dhansingh Pawar
Age	55 years
Education	VIII th Std.
Address	
At: Satmane, Post: Ravalgaon, Tk.:Malegaon, Dist.: Nasik, MS	
Contact No	9823068666
Farm details	
Total cultivated area	70 acres
Total area under pomegranate	45 acres
Total area under other crops	25 acres
Cost of cultivation /acre/year	Rs.80,000-90,000/-
Status before and after pomegranate cultivation	
Before pomegranate cultivation	After pomegranate cultivation
<ul style="list-style-type: none"> He worked as labor with parental land of 2.5 acres. Earlier crops grown were bajra, groundnut etc. with yearly earnings/profits of Rs. 70000 to 80000/- 	<ul style="list-style-type: none"> Owns 70 acres of land, has 60 lakh house, Innova car, 3 tractors and all farms mechanization equipments. Earns 2-3 caror per year only from pomegranate.
Description of Technology	
<ul style="list-style-type: none"> In 1985, seedlings derived from pomegranate seeds were planted at 14 x 14 ft and first year got income of Rs.11,000/- The maximum use of organic fertilizers resulted in increased growth/ vigor of plants and higher production capacity. For proper size and color of the fruits, cover the entire tree with net; thus, they are exporting pomegranate since last 5 years. 	
Remarks by the farmers	
<ul style="list-style-type: none"> Started pomegranate cultivation due to the guidance from the friend, Shri. Sampatrao Vishnu More, whom I consider as 'Guru'. Own present status due to export oriented pomegranate production. 	
<div style="display: flex; justify-content: space-around;">   </div>	




Nursery and Intercropping in pomegranate-a success story		
Personal profile		
Name	Shri. Subhash Kisanrao Tekade Patil	
Age	66 years	
Education	X th Std.	
Address		
At: Pimpalgaon (Dhola), Post: Bharsirpura, Tk.: Kalamb, Dist.: Osmanabad		
Contact No	9763474868	
Farm details		
Total cultivated area	18 acres	
Total area under pomegranate	5 acres for pomegranate cultivation; 1400 plants for nursery	
Total area under other crops	13 acres	
Cost of cultivation for pomegranate per acre/year	Rs.70,000-80,000 /-	
Status before pomegranate cultivation and after		
<ul style="list-style-type: none"> Truck driver during 1986- 2000 with only 5 acres of parental land. Earlier crops grown were Jowar, soybean etc. with yearly earnings/profits of Rs. 60,000 to 70000/- 		<ul style="list-style-type: none"> After 2000, I started farming on ancestral lands due to Shri. Ramesh Karche. I became pomegranate grower. Earlier, the profit was about Rs.15-16 lakhs/ annum and now, I get a profit of Rupees 30-35 lakhs per annum.
Description of Technology		
<ul style="list-style-type: none"> In 2001, new pomegranate plantation was planted for cultivation and nursery purpose. Since 18 years, there has been no prevalence of bacterial blight diseases. Maintains the orchard using machineries, power tillers and constructed big size storage house etc. Application of Vermicompost @5 kg per plants. My experiment of application of honey and ghee mixed with sugarcane resulted in encouraging result for yield. 		
Remarks by the farmers		
<ul style="list-style-type: none"> Cultivated pomegranate because of my friend Shri. Ramesh Kharche. Own present status due to nursery and intercropping in pomegranate. 		
		



Pomegranate success due to intervention of ICAR-NRCP, Solapur		
Personal profile		
Name	Shri. Dadsaheb Bajrang Ahire	
Age	54 years	
Education	VII th pass	
Address		
At Post: Nirmal Pimpri, Tk.:Rahta, Dist: Ahmednagar		
Contact No	9730380730	
Farm details		
Total cultivated area	7 acres	
Total area under pomegranate	2 acres	
Total area under other crops	5 acres	
Cost of cultivation /acre/year	Rs.20,000 to 25,000/-	
Status before and after pomegranate cultivation		
<ul style="list-style-type: none"> Two acres of parental land Earlier crops grown were redgram, groundnut etc. with yearly earnings/profits of Rs. 70,000 to 75000/- 		<ul style="list-style-type: none"> Now, I have a house of 50 lakhs as well as own Bolero vehicle and 2 acres of land. Earns Rs.40 to 45 lakhs per year only from pomegranate.
Description of Technology		
<ul style="list-style-type: none"> In 2001, I planted 330 disease free saplings of pomegranate at 12x13ft. Increased use of organic fertilizers led to a lot of revenue. Under the famine situation for 12 years, irrigation through tanker water was of great help for me to achieve good yield. In 2009, yellow spots affected my plants and information provided by ICAR-NRCP, Solapur has solved my problem. 		
Remarks by the farmers		
<ul style="list-style-type: none"> Cultivated pomegranate because of my friend Shri. _____ Own present status exclusively due to pomegranate cultivation. 		
		

Organic manure for sustainable pomegranate production		
Personal profile		
Name	Shri.Purushottam Anirudh Chawan	
Age	34 years	
Education	X th Std.	
Address		
At:Chorambha; Post:Chorambha; Tk. :Dharur (Kille); Dist.:Beed		
Contact No.	9096961755	
Farm details		
Total cultivated area	10 acres	
Total area under pomegranate	5 acres	
Total area under other crops	5 acres	
Cost of cultivation /acre/year	Rs. 20,000-25,000/-	
Status before pomegranate cultivation and after		
<ul style="list-style-type: none"> • He worked has Laborers with parental land is 1.5 acres only • Earlier crops grown were Jowar, Red gram etc. with yearly earnings/profits of Rs. 40,000 to 50,000/- • Shri. Subhash (Tekade) Patil inspired me to start pomegranate cultivation. • Dug out 6 bore wells and 2 open wells and also purchased motor cycles, four wheeler, tractor and HTP sprayer. • Earns 30 to 40 lakhs per year only from pomegranate 		
Description of Technology		
<ul style="list-style-type: none"> • Healthy mother plants were chosen for propagation of disease free plants and then planted in 5 acres land. • Increased use of organic fertilizers led to huge yields during last ten years. • Application of water through micro-irrigation system helped me to overcome the shortage of water for pomegranate plants. • In 2008, pomegranate orchard was planted and got Rs. 8-10 lakhs per year from nursery. 		
Remarks by the farmers		
<ul style="list-style-type: none"> • In 2008, pomegranate orchard was planted and got Rs. 8-10 lakhs per year from nursery. • Own present status due to organic manures for sustainable pomegranate production. 		
		


Water management and Organic farming for production of pomegranate	
Personal profile	
Name	Shri. Dattatray Bhagwan Kolw
Age	32 years
Education	12 th Std
Address	At+Post:Ajnale; Tk.:Sangola; Dist.:Solapur -413 308, MS.
Contact No	9096723503
Farm details	
Total cultivated area	16 acres
Total area under pomegranate	14 acres
Total area under other crops	2 acres
Cost of cultivation /acre/year	Rs.1.5 lakhs
Status before pomegranate cultivation and after	
<ul style="list-style-type: none"> • Mechanic for two wheeler & HTP sprayers with only 2 acres of parental land. • Earlier crops grown were capsicum, groundnut etc. with yearly earnings/profits of Rs. 65,000 to 70,000/- 	<ul style="list-style-type: none"> • We purchased 13 acres of land and Scorpio due to pomegranate production. Earns about Rs.30 to 40 lakhs per year only from pomegranate cultivation.
Description of Technology	
<ul style="list-style-type: none"> • In 1995, 300 saplings of pomegranate cv. Ganesh were planted at 13 x 9 ft distance in one acre land. • Constructed two farm ponds of capacity 1.5 crore litres for irrigation purpose. • Crop regulation during Hasta Bahar (August-September) & application of organic manures 	
Remarks by the farmers	
<ul style="list-style-type: none"> • I got inspiration from Shri. Raju Patil, who encouraged me to start the drip irrigation shop and the plants given him free of cost helped me to move forward in life. • Own present status due to water management and organic farming in pomegranate cultivation 	
	

Organic farming technology for production of pomegranate		
Personal profile		
Name	Shri. Lalaso Bapurao Surwanshi	
Age	55 years	
Education	Xth Std	
Address		
At Post: Khandodwadi; Tk: Atpadi ; Dist: Sangli -416 209		
Contact No	9075431840	
Farm details		
Total cultivated area	33 acres	
Total area under pomegranate	10 acres	
Total area under other crops	10 acres	
Cost of cultivation /acre/year	Rs 1.5 lakh	
Status before and after pomegranate cultivation		
<ul style="list-style-type: none"> • Parental land is 1.5 acres and labour work in own farm. • Earlier crops grown were cotton, maize etc. with annual earnings/profits of Rs. 50,000 to 55,000/- 		<ul style="list-style-type: none"> • Total land is about 33 acres. • Last year, earned Rs.80 to 85 lakhs per year only from pomegranate
Description of Technology		
<ul style="list-style-type: none"> • During 1994 to 2000, pomegranate cv. Ganesh was cultivated and in 2000, pomegranate cv. Bhagwa was planted at 12 x 12 ft. • Constructed farm ponds of capacity 2.5 crore litres by spending Rs 8 lakhs. • I apply organic fertilizers in excessive quantities such as 40 kg of FYM, 10 kg of Nimboli pend, 5 kg of sugarcane baggass and 4-5 kg of sugarcane pachat per plant. 		
Remarks by the farmers		
<ul style="list-style-type: none"> • Own present status due to organic farming technology in pomegranate 		
		

Integrated management practices for healthy and disease free pomegranate orchard		
Personal profile		
Name	Shri. Krishna Yamanappa Salapur	
Age	40 years	
Education	B A, B.Ed.,	
Address		
At:Chikkasamshi, Post:Kaladagi, Hobali,Taluka:Bagalkot		
Contact No	08105559132, 7892003474	
Farm details		
Total cultivated area	30 acres	
Total area under pomegranate	9 acres	
Total area under other crops	21 acres	
Cost of cultivation /acre/year	Currently Rs. 1.12 lakh/ acre and gradually decreased from 1.75 lakh from 2012	
Status before pomegranate cultivation and after		
<ul style="list-style-type: none"> In the same area of pomegranate, earlier sugarcane was cultivated with earnings of Rs.75000/acre. 	<ul style="list-style-type: none"> With adoption of pomegranate, minimum of Rs.3 lakhs/acre and maximum of Rs. 6 lakh earnings were made since last 3 years. 	
Description of Technology		
<ul style="list-style-type: none"> Adoption of IDIPM strategies of ICAR-NRCP, Solapur and recommendations of UHS, Bagalkot. Use of Bio-inoculants for reduced use of fertilizers and also for improved efficacy of fertilizers Use of bio pesticides for reduced use of synthetic chemicals and antibiotics Use of more preventive strategies for management of pest and diseases and clean cultivation Use of only recommended chemicals and fertilizers for pomegranate and production without help of private consultants 		
Remarks by the farmers		
<ul style="list-style-type: none"> Became Member Secretary in FPO and invited as progressive farmer in <i>Krishi Mela</i>. Own present status due to IMP in pomegranate cultivation 		
		

Good management practices and phytosanitation measures for healthy and disease free orchard		
Personal profile		
Name	Shri. Bhagwat Uttam Pawar	
Age	54 Years	
Education	XIIth Std.	
Address		
At Post: Tamshidwadi; Taluka: Malshiras, Dist: Solapur -413101, MS.		
Contact No	9822944949	
Farm details		
Total cultivated area	70 acres	
Total area under pomegranate	12 acres	
Total area under other crops	58 acres	
Cost of cultivation /acre/year	Rs. 1.5 lakhs	
Status before pomegranate cultivation and after		
<ul style="list-style-type: none"> Transport and Export (HUNDE KARI) with 1.5 acres of ancestral land Earlier crops grown were bajra, jowar, wheat etc. with annual earnings/profits of Rs. 90,000 to 95,000/-. 		<ul style="list-style-type: none"> After that, we got about Rs. 90-95 lakhs from the 1230 plants in the last 3 to 4 years and thereafter I have made a lot of progress due to pomegranate. From the returns of pomegranate, I have established a Factory of Nimboli Pend.
Description of Technology		
<ul style="list-style-type: none"> Initially, pomegranate cv. Ganesh was planted in 1989 and in 1999, I planted pomegranate cv. Bhagwa at 15x10 ft distance in 1 acre land. Form pond of capacity 2.75 crore litres was constructed on 2 acres of land by spending Rs. 26 lakhs and provided irrigation to 11 acres of land, through gravitation force without using electricity. Increased quantity of phosphorus and potash increased root production (white roots) and controlled the BBD disease. The amount of water was given very less based on atmospheric demand. With the application of Kalisena and Josh, the incidence of wilt disease was almost under control. I export pomegranate fruits to Europe, and get lot of money from the crop of <i>Hasta Bahar</i>. 		
Remarks by the farmers		
<ul style="list-style-type: none"> Own present status only from good management practices for pomegranate cultivation 		
		

Organic farming of pomegranate		
Personal profile		
Name	Shri. Rajendra Sitaram Yewale	
Age	26 Years	
Education	M.Sc.(Agri.) in Entomology	
Address		
At Post: Malharwadi; Taluk: Rahuri; Dist: Ahmednagar – 413 705		
Contact No	7772309514	
Farm details		
Total cultivated area	70 acres	
Total area under pomegranate	40 acres	
Total area under other crops	30 acres	
Cost of cultivation /acre/year	1.6 lakhs	
Status before pomegranate cultivation and after		
<ul style="list-style-type: none"> • 5 acres of parental land • Earlier crops grown were onion watermelon etc. with yearly earnings/profits of Rs. 4 lakhs to 5 lakhs 		<ul style="list-style-type: none"> • Owns 70 acres of land, has house worth Rs.50 lakhs, Scorpio car, 3 tractors and all farms mechanization equipments. Earns Rs.3 crore per year only from pomegranate.
Description of Technology		
<ul style="list-style-type: none"> • Organic manures resulted in production of pesticide residue free fruits • Through regulated use of hydrogen peroxide, the disease incidence is under control. • Pipeline water from Mula dam is used for irrigation of pomegranate crop (1.80 crore litres) • Disease free saplings were used for cultivation and planted in nursery. • Tractor spraying, dusting, slurry application and intercultural activities were done instantly. • Honey bee hives were used for pollination and better fruit set and fruit retention. • Organic manures: 15 tons per acre- first 2 years; 22 tons per acre - 3rd year 		
Remarks by the farmers		
<ul style="list-style-type: none"> • Own present status due to pomegranate cultivation 		
		

Exportable pomegranate production by using salty water		
Personal Profile		
Name	Shri. Rahul Amruta Rasal	
Age	30 years	
Education	Diploma in Agriculture	
Address		
At Post:Nighoj; Tk.:Parner ; Dist. Ahmednagar -414 306, MS.		
Contact No	9766550624	
Farm details		
Total cultivated area	60 Acres	
Total area under pomegranate	13 Acres	
Total area under other crops	43 Acre	
Cost of cultivation /acre/year	1.5 Lakhs	
Total profit per acre per year	48 Lakhs	
Status before pomegranate cultivation and after		
<ul style="list-style-type: none"> • 20 acres parental land. • Earlier crops grown were onion watermelon, grapes etc. with yearly earnings/profits of Rs. 2.5 lakhs 		Owns 60 acres of land, has house worth Rs. 40 lakhs, tractors and all farms mechanization equipments. Earns 48-50 lakhs per year only from pomegranate.
Description of Technology		
<ul style="list-style-type: none"> • In 1990, my father planted 1 acre Arakta and 1 acre Ganesh variety of pomegranate and then in 1999, additional 3 acres of the Bhagwa variety of pomegranate was planted. • For irrigation purpose, water with TDS-2000 and pH-9 was used by the R.O. plant of 1000 liters per hour capacity that discharge water with TDS-50 and pH 6.9 . This water is used spraying purpose. • Due to this, the total expenditure on my spraying cost almost 30% less and the results from the water spraying are also more effective. • I have installed my own weather equipment in my field so that I can get the weather forecasts already. I get help in making decisions on the field first, and from that I have the advantage that if I understand the incidence of disease and pests due to the change in the prevailing environment, I can change the spraying costs and spraying schedule. • Previously, organic carbon content of soils in my orchard was 0.40%, but now it is 1.40%, due to the fact that 5 mg of Oxygen in biogas slurry is dissolved using slurry federator and used for agriculture. • After I started exporting the pomegranate cv. Bhagwa, my life got restored. • In 2010, in the neighboring villages, 40 acres of land was purchased and developed; In that farm, I constructed a pond of 10 million capacity and planted 10 acres of pomegranate. 		
Achievements		
<ul style="list-style-type: none"> • Own present status due to pomegranate cultivation by using salty water. 		
