

E-ZINE Magazine for military veterans in the corporate January 2025, Volume VII, Issue 1

## AGRITECH A SUNRISE SECTOR









## From the Editor

Dear Readers.

Wishing you all A Very Happy and Healthy New Year. Agriculture is the backbone of any economy, and in today's technology-driven world, agritech is revolutionizing the industry. For military veterans transitioning to civilian life, agritech presents a unique opportunity to leverage their skills, discipline, and leadership in a sector ripe with innovation and purpose and hence we have taken this month the theme as **Agritech - A Sunrise Sector** 

From precision farming and robotics to supply chain optimization and sustainable practices, agritech demands a mindset that veterans are uniquely equipped to bring. Moreover, many veterans have technical expertise, whether in engineering, mechanics, or IT—skills that can be directly applied to the technological advancements shaping modern agriculture. For instance, drone technology, used extensively in the military, is now a cornerstone of precision farming. Veterans with UAV experience could find themselves at the forefront of transforming crop monitoring and irrigation systems.

Veterans often seek careers that offer a sense of purpose, similar to their military service. Agritech addresses critical global challenges like food security, climate change, and resource optimization. Contributing to these issues provides meaningful work that aligns with a mission-oriented mindset.

The agritech sector is teeming with entrepreneurial opportunities. From developing smart irrigation systems to launching apps that connect farmers with markets, veterans can channel their resourcefulness and strategic thinking into creating impactful startups.

Agritech is not just about growing food; it's about growing opportunities—for farmers, consumers, and veterans alike. For those transitioning out of the military, the agritech industry provides a fertile ground to apply their skills, learn new ones, and continue making a meaningful impact.

As the world looks to feed a growing population sustainably, veterans can be the backbone of this mission, transforming not only their lives but the future of agriculture itself.

I hope that you will enjoy reading this edition. You can email me your feedback, directly at <u>forcesnetworkz@gmail.com</u>. Plant the seed of change by getting into Agritech.



Yours catalyst

Capt Rajesh Nair Editor, ForceNet E-Zine



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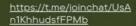
**PORTFOLIOS MANAGED** 

A recent article, by our CEO, Col Sanjeev Govila (retd), in The Economic Times, about a financial pandemic gripping our Jawans, Sailors & **Airmen**, evinced a lot of interest in the armed forces community.

We have initiated ACTION as per the advice received from some of the veterans.

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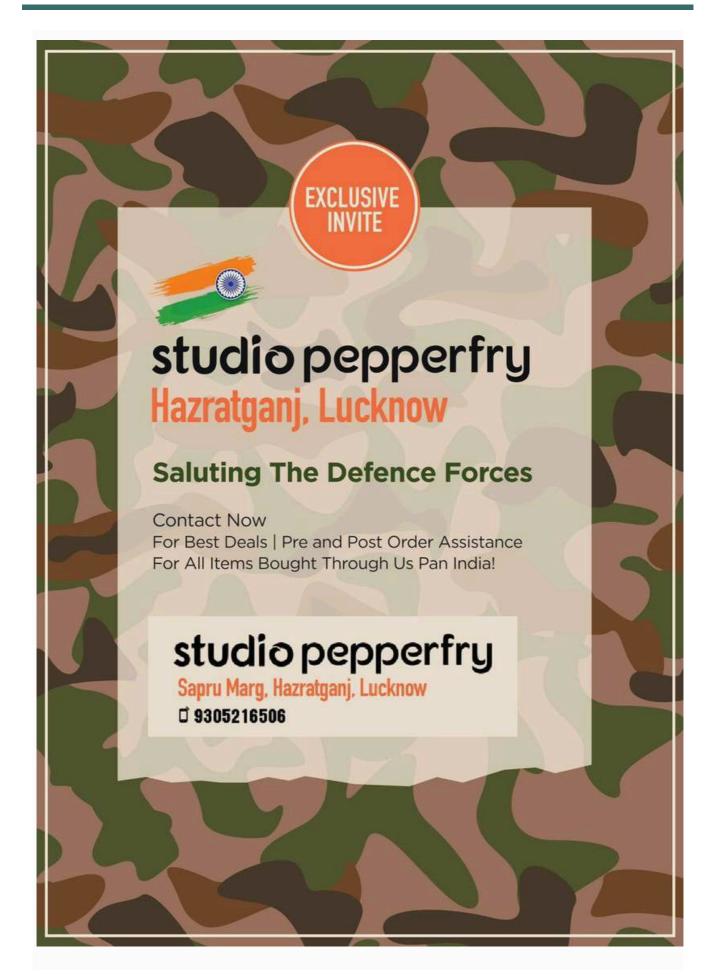
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### **A NOTE FOR THE READERS**

This is an interactive e-magazine with active links on many pages, including the advertisements, which can be used by just tapping or clicking on them.

For ease of providing feedback, such links have been provided at the end of the articles too.

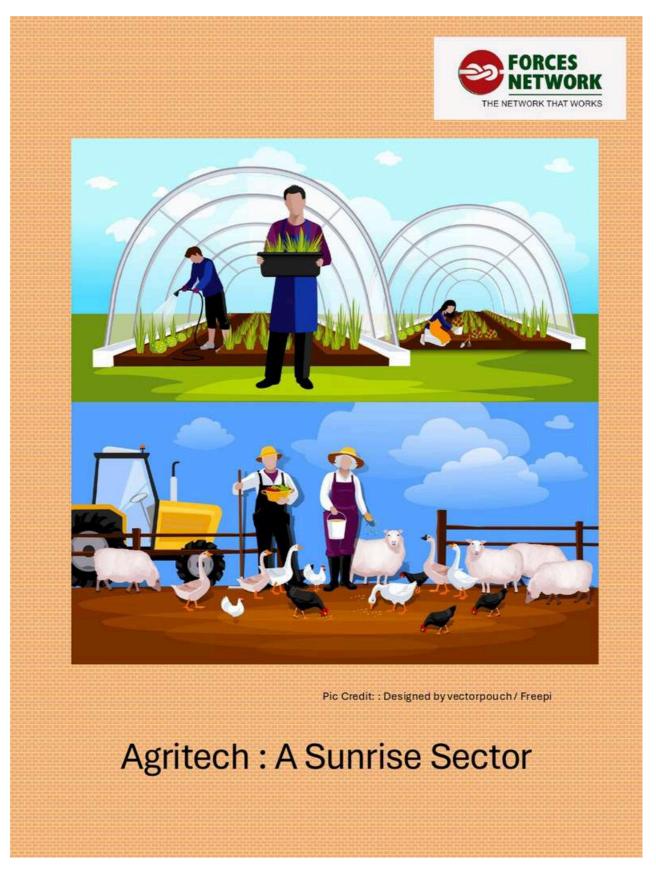






Amit Walvi





### **Theme Articles**



### Theme Article

# Agritech – The new Sunrise Industry with endless Opportunities for Budding Entrepreneurs

BY VP SHARMA

The contents of the series of articles in this issue are purely based on my experience through my journey as an agritech entrepreneur and how the deep learnings of service in the Indian Army and the Corporate world have helped me navigate the initial years of challenges.

The idea is to share the knowledge, experience, opportunities, risks and their mitigations in an agritech venture, with you, the reader from Armed Forces background.

It is my hope that as you read these articles, many of you will be able to relate with your innate aspirations to start / spend the second innings of your professional life into something which gives consistent financial earnings along with a deeply satisfying and purposeful life where our experience and learnings of Armed Forces years are put to good use.

So, let us start.

Can I be an entrepreneur?

#### Of course you can be!



Talk to any seasoned entrepreneur and he / she will tell you that entrepreneurship is, at its root, a state of mind. We have all displayed entrepreneurial streak at different points of time in our profession when we have taken up risks and ventured into the unknown, purely based on our self-confidence and self-belief but nobody called it entrepreneurship then.

In the ultimate analysis, whether you can be

or should be an entrepreneur is simply a matter of choice based on considerations like progressive and meaningful life versus steady and routine life, capacity to take risks to achieve a goal / purpose dear to you or a safe and steady life.



#### But I do not have experience in Agritech?

Contrary to what many may believe, many ex-Armed Forces Officers have the defining traits of entrepreneurship. Domain experience, technical knowledge are surely necessary but not sufficient. What one needs in equal measure, if not more, is the capacity to take measured risks, ability to go through the ups and downs of the entrepreneurial journey with confidence, ability to build and lead teams, forge networks of partners, supporters and people working in similar areas, ability to dig your heels in when things do not go right, handling conflicts and change and so on.

When we started Gratitude Farms, we had no knowledge of agriculture, let alone natural farming, aquaponics and many things that we have done since, in the last seven years. But a sincere aspiration to learn and grow helped. And what helped more was the qualities listed above; and for these, I can only say "Gratitude" to the way they were imbibed while in Army service.

We must not underestimate the default qualities that our life in Armed Forces gives us. How much we want to use it in our post-retirement life .... well, that depends on each of us.

### Why Technology Enabled Agriculture offers great Opportunities

In the coming years, the fields of agriculture are poised to become a battleground of innovation, profitability, and sustainability.

Here, in the series of these articles, we will talk about the **combination of** a wide range of **agricultural technologies with natural farming**. The reason is simple – natural farming addresses the challenges associated with degradation of soil, conservation of water, ill effects of rampant use of chemicals and pesticides, while technologies for agriculture help in improving productivity and reducing costs.

This is particularly useful when we consider the rising demand for healthy and nutritious food amidst dwindling quality of agricultural land. The next two decades will see a paradigm shift in how food is grown, distributed, and consumed.

### Why Regenerative or Natural Farming?

Within this space, adoption of Natural Farming or Regenerative Farming practices is likely to give higher returns with lesser relative risk (both business as well as operational risks).

According to the UN, about 33% of the world's soil is already degraded, and if we don't switch to more sustainable practices, the consequences could be catastrophic.

Why? Because the demand for healthy food is rising.

So, we have a market demand that is steadily rising, while at the same time, we have a rapid soil degradation due to excessive use of chemicals.



#### Industrial Agriculture

### Regenerative Farming



Total agricultural land in India tops over 500 Million acres.

Of this, an estimate of less than 5% is under natural farming / regenerative Farming \*

So, there are deep challenges to be resolved on both the Demand side as well as supply side and everything in between across the value-chain of agriculture.

And herein lies the opportunity. The number of entrepreneurships rising in this space is rising quite fast and will continue to attract entrepreneurs for many years.

### Is there money (sustained profitability) in agriculture?

The short answer is yes; loads of it.

That said, we all know that making money in any domain is never easy. The **risk – reward** paradigm is as applicable in agritech entrepreneurship as it is anywhere else.

Be that as it may, the good thing is that the opportunities in this space are huge, precisely because the demand and the challenges to meet that demand are huge.



Being in this field at this time is like being at the right place, at the right time when a huge wave of growth comes and carries us to growth and success.

We will briefly talk about the opportunities in the following articles as we look at possible areas of entrepreneurship for new and budding entrepreneurs.



### A few Guiding Principles for all new Entrepreneurs

The following guiding principles can serve well to anyone who takes up entrepreneurship in the space of agriculture:

- Solve a Problem. Only those entrepreneurships succeed in the long run that prioritize solving the deep problems for the target customer base over making quick profits. So, it is essential to identify the problems (and hence opportunities) and then build a business around it.
- Do not chase high profits too early in the journey. A corollary to the point above is that do not chase money in early years, much as the temptation may be. Building a sustainable business model is more important than working on a 10X growth model in the early years of the journey.
- Build-a-little, Field-a-little. The space of technology enabled agriculture has limitless opportunities for next two decades at least, if not more. In such a scenario, take your time to understand the problems, technologies and systems behind the possible solutions, and try them out at a small scale before making big plans.
- Stress-of-Growth versus Stress-of-Greed. This is a kind of summary of the above three points. Positive stress is a good thing; it helps us focus more and put more energy and concentration in pursuit of our goals. But, if you meander away to making money for the sake of it, it is likely that you will accumulate unwanted stress that could derail your long-term growth.
- No one gets it right the first time. Entrepreneurs carry their failures as a chip on their shoulders, for each failure, if managed well, is a great learning towards success that will eventually come.
- Your network is your net-worth. In the space of entrepreneurship, it is both easy and highly recommended to be part of professional networks. Why? Because almost all entrepreneurs are going through or have gone through the experiences that you are now going through. Some reasons for developing networking as you grow:
  - For mutual learnings of both failures and best practices,
  - For potential partnerships and collaborations.
  - For finding mentors with whom to bounce your ideas and fortify your plans.
- "Upon the quality of your goal, will depend the quality of your life". This is a universal truth, applicable for everyone trying to live a conscientious life. Notice that nowhere in this statement are we mentioning the "achievement" of goals. Merely uplifting your goals will uplift the quality of your life.



### Possible Opportunities in Technology enabled Agriculture for Entrepreneurs

#### Please note:

- Our Focus is on Natural Farming and its Allied areas.
- The groupings listed below are a small subset of what is possible within the domain of agritech / agri-business and have been made only for the purpose of giving the readers an idea of the breadth and depth of possibilities in this space.

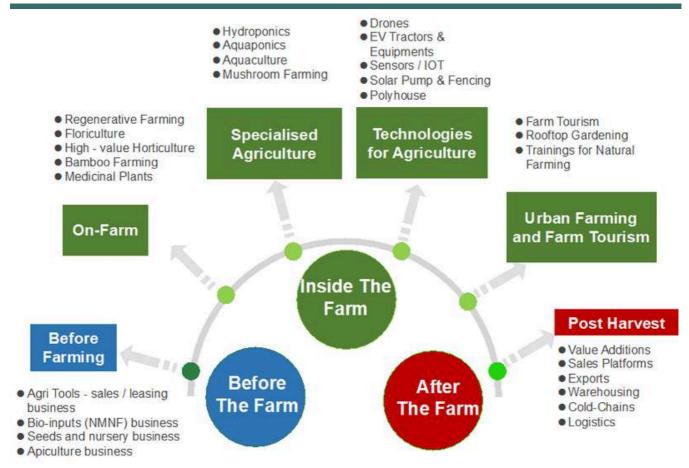
The spectrum of opportunities across the value -chain of agriculture is wide. So, for the sake of simplicity, we can thematically divide the discussion in the following broad areas as follows:

- 1. Before-the-Farm:
  - Agri Tools sales / leasing business
  - Bio-inputs business.
  - Seeds and nursery business
  - Apiculture business
- 3. Specialised Forms of Agriculture
  - Hydroponics
  - Aquaponics
  - Aquaculture
  - Mushroom Farming
- 5. Urban Farming Related
- Farm Tourism
- Rooftop Gardening
- Trainings for Natural Farming

- 2. Inside-the-Farm / During Farming:
- Regenerative Farming
- Floriculture
- High value Horticulture
- Bamboo Farming
- Medicinal Plants
- 4. The "Tech" in Agritech
  - Drones
- EV Tractors & Equipment
- Sensors / IOT
- Al for Agriculture
- Cloud Based Farm ERP
- Solar Technology for Irrigation and Fencing
- Climate Controlled Agriculture (Polyhouse)
- 6. Post Harvest / After The Farming
- Value Additions
- Sales Platforms
- Exports
- Warehousing
- Cold-Chains Logistics

Entrepreneurs who step into agriculture now, particularly natural farming supported by the plethora of technologies available today, are getting in on the ground floor of a new green revolution.





#### In summary

The next two decades will see an explosion in opportunities at the intersection of technology and natural farming. Natural farming emphasizes working with nature, not against it—think crop diversity, organic composting, and zero synthetic fertilizers. On the other hand, technology is revolutionizing everything from precision farming to supply chain management. Combine the two, and you've got a recipe for high profits, sustainability, and global impact.

India, in particular, is uniquely positioned for this revolution. With over 60% of its population involved in agriculture and a thriving startup ecosystem, our country is ground zero for tech-enabled farming solutions.

For first-time entrepreneurs, this is more than just a lucrative field—it's a chance to shape the future. Sure, there will be challenges, but the rewards—both tangible and intangible—make it worth every bit of effort.



Maj VP Sharma is the Co-Founder and CEO of Gratitude Farms, an Agritech Startup working in the space of technology enabled Natural Farming. An alumnus of NDA. He served in Indian Army (Corps of Signals) for 16 years from 1985 to 2001. Post Army he has worked in Telecom / Networking sector with companies like Airtel, Ericsson and Nokia Siemens Networks and Cisco Systems in senior positions. Post corporate he took into entrepreneurship through two ventures- Gramonnati Trust and Gratitude Farms.



### Theme Article

## Regenerative (Natural) Farming - Why it presents itself as a Great Opportunity

BY VP SHARMA

### What is Regenerative Farming

Regenerative Farming, in simple words, refers to Natural Farming, It is a sustainable agricultural approach that works in harmony with nature, avoiding synthetic chemicals, fertilizers, and pesticides. It focusses on relying on natural ecosystems to restore soil fertility and maintain crop health.

### **How it Differs from Conventional Farming**

- Inputs:
  - Natural farming avoids chemical inputs and synthetic fertilizers.
  - Conventional farming relies heavily on artificial fertilizers, pesticides, and genetically modified seeds.
- Soil Health:
  - Natural farming focuses on enriching soil health using organic matter.
  - Conventional farming often depletes soil nutrients through monocropping and chemical usage.
- Environment:
  - Natural farming promotes biodiversity and ecological balance.
  - o Conventional farming can lead to pollution, soil erosion, and loss of biodiversity.

### **Regenerative Farming - a Goldmine of Opportunities**

Challenges and Impact of Current, Chemical Intensive Agricultural System

To understand the urgent need for Regenerative Farming at large scale, let us consider the following facts:

- India, with a population of 145 crore and rising, will need to grow 50% more food by 20250 (@ an annual rate of increases of 2% to 3%).
- The current, predominant form of agricultural practice across the country relies heavily on chemical fertilisers that have led to the decline in soil health to alarming levels (India has 4% of global agricultural land but 28% of global degraded soil).
- The continuous use of synthetic fertilisers over the past six decades has reduced the soil organic carbon content from a healthy national average of 2.4 per cent in 1947 to merely 0.4 per cent today. This is alarming and well below the threshold of



1.5 per cent, which is essential for maintaining soil's arable properties.

- There are direct and huge costs associated with wasteful, energy-intensive, fossil fuel-based agriculture system, currently being practiced in the country.
- Further, the hidden and intangible costs on account of that include damages to health, environment and society.
- In addition to all this, the consistent degradation of soil fertility and health has impacted the nutritional content of our agricultural produce significantly.

### Indian agriculture cannot succeed if soil health fails

It is not difficult to see that Natural Farming offers great opportunities to those who step into this business now and in coming years.

Most people, familiar with the agricultural industry, will agree that in the coming years, the fields of agriculture are poised to become a battleground of innovation, profitability, and sustainability.

### The Rising Global Demand for Sustainable Farming

 Regenerative Farming, by focusing on practices like crop rotation, organic manure, and biodiversity, promises a healthier planet and healthier profits. Regenerative / Natural farming works with nature, not against it.

• Global and in India, consumers are increasingly demanding organic, chemical-free produce. The organic food market is set to grow at a CAGR of 11.9% from 2022 to 2030, reaching a valuation of \$564 billion by 2030.

### The Big Picture - for budding Entrepreneurs

India is uniquely positioned to lead the world in sustainable agriculture. Our country has 15 well-defined Agri-climatic zones, a massive labour force, and increasing tech penetration.

Add to this the growing middle-class demand for organic produce and global markets eager for Indian exports, and you have a recipe for entrepreneurial success.

In India, with nearly 60% of its population dependent on agriculture, the sector contributes only about 18% to India's GDP. The disparity screams inefficiency and potential.



The next two decades will see a paradigm shift in how food is grown, distributed, and consumed. Add to it the elements of technology, and you have a great opportunity to make real difference.

Entrepreneurs who step into agriculture now, particularly natural farming, are likely to ride a boom of a new green revolution.

Regenerative or Natural farming, in our context, is not just about growing food; it is about growing a movement. By combining technology with tradition, Agrientrepreneurs can create businesses that are not just profitable but are also environmentally and socially impactful

### **Challenges That Make the Opportunity Bigger**

It's not all sunshine and rainbows, though. Entrepreneurs in this space will face hurdles—lack of awareness among farmers, limited initial funding, and the need for consumer education about natural produce.

But here's the thing: great businesses thrive on solving real problems. These challenges are opportunities in disguise for those willing to put in the work.

That is why Government and Private Investors are pouring funds into this space.

The latest Initiative of **National Mission for Natural Farming**, announced by Central
Government points to the importance of this field.

Climate change adds urgency to the switch to natural farming. Rising temperatures, erratic rainfall, and soil erosion are already affecting yields.

Sustainable practices aren't just a choice; they're a necessity.

Investment opportunities abound in this space as a new genre of Private Investors are now funding Startups for Climate impact and Circular Economy related business models.

### Technologies that help improve Productivity, reduce Costs and increase Profits

- **Precision Agriculture.** Technologies like drones, IoT sensors, and AI is helping farmers monitor soil health, weather patterns, and crop growth. With data-driven insights, natural farming becomes not just sustainable but hyper-efficient.
- **Blockchain for Supply Chains.** One of the biggest challenges for natural farmers is reaching the right market. Blockchain technology is bridging this gap by ensuring transparency in the supply chain, enabling farmers to sell their organic produce directly to consumers and exporters.
- **Smart Irrigation.** In India, the problem of water scarcity is a growing concern, which is as much about water tables going down, as it is about wasteful



management of water in irrigation. Technology solutions like drip irrigation, enabled by AI, ensure minimal water wastage while maximizing crop yield.

- **Digital Marketplaces.** There are a number of e-commerce platforms that connect farmers to buyers, reducing middlemen and increasing profits. This is a game-changer for small-scale natural farmers.
- Room for Innovation. From farm management apps to biotech innovations that enhance soil fertility, there's no shortage of ways to innovate in this space. First-time entrepreneurs can carve out a niche that combines profitability with purpose.

### Where is the Money?

Well, there are already thousands of small entrepreneurs making loads of money in this space. A few indicators of how Natural Farming can be become sustainably profitable for entrepreneurs:

- Let's talk numbers. Organic produce in India commands a price premium of 20-40% compared to conventionally farmed products. On a global scale, this premium can go even higher.
- Meanwhile, natural farming significantly reduces input costs, boosting profit margins.
- And if you venture into high-demand items like organic spices, herbs, or superfoods (think turmeric, moringa, or quinoa), the profits skyrocket.

### **Intangible Benefits: More than Just Money**

Now, let's address the less-talked-about benefits of agritech and natural farming ventures:

- **Healthier Communities.** By promoting chemical-free farming, you're directly contributing to healthier food for people. Imagine the satisfaction of knowing your business helps reduce diseases caused by pesticide-laden produce.
- **Environmental Impact.** Natural farming rebuilds soil health, conserves water, and reduces carbon footprints. You're not just making money; you're leaving the planet better than you found it.



- **Job Creation in Rural Areas.** Agritech startups are creating employment opportunities, especially for rural youth. By training them in sustainable practices or equipping them with technology, you're uplifting entire communities.
- **Cultural Revival.** India's farming heritage is deeply tied to natural practices. By embracing natural farming, you're preserving traditions while giving them a modern twist.
- **Self-Reliance.** Natural farming makes India less dependent on costly chemical imports.

Maj VP Sharma is the Co-Founder and CEO of Gratitude Farms, an Agritech Startup working in the space of technology enabled Natural Farming. He is an alumnus of NDA, Khadakwasla. He served in Indian Army (Corps of Signals) for 16 years from 1985 to 2001. From 2001 to 2017, he worked in Telecom / Networking sector during the years of hyper-growth in country. During this period, he worked for Airtel, Ericsson and Nokia Siemens Networks and Cisco Systems in senior positions. In 2017, he left his corporate career and along with three of his close friends to take up social entrepreneurship full-time through two ventures- Gramonnati Trust and Gratitude Farms. His work draws upon 32 years of Military and Corporate experience with an aspiration to create a world-class enterprise that synthesizes the power of discipline, innovation, and technology towards the mission of helping develop one million acres of agricultural land into Natural Farming practice. He lives in Pondicherry. He is an alumnus of IIT Kanpur (M Tech), MCTE, Mhow (B Tech).

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### Theme Article

## Aquaponics - An Innovative Agricultural System for the Future of Food Security

BY VP SHARMA

Aquaponics is a modern implementation of an ancient farming technique.

The evidence of a symbiotic relationship between plants and fish has been found in many civilizations. The Chinese, Thai, and Indonesians who cultivated rice in paddies were known to add fish to the paddies to improve the yield and harvest fish for protein. Aztec used a system of man-made agricultural islands in fish laden ponds to grow plants which could benefit from the nutrients provided by the fish and the abundant water supply.

Aquaponics is rapidly gaining traction among urban entrepreneurs and small-scale farmers due to its sustainable nature, high efficiency, and dual revenue potential. This eco-friendly approach is a game-changer in agriculture, addressing global food security challenges while conserving precious resources like water and arable land.

### **How Aquaponics Works**

Aquaponics operates on the principle of mutualism:

- Aquaponics is a combination of AQUA-culture (fish farming) and hydro-PONICS (growing plants in water).
- **Fish Produce Waste:** As the fish eat and grow they produce nutrient-rich waste, primarily in the form of ammonia.
- Bacteria Convert Waste: Beneficial bacteria convert ammonia into nitrates, a form of nitrogen plants can absorb.
- **Plants Purify Water:** The plants absorb the nutrients in the water and the water, so purified, is returned to the fish culture tanks. This closed-loop system mimics natural ecosystems, requiring minimal external inputs once established.

### **Key Features of Aquaponics**

- Water Efficiency: Uses up to 90% less water than traditional farming methods, making it ideal for water-scarce regions.
- Higher Yields. Up to 2-3 times higher yield per sq.m of land used.



- **Dual Revenue Streams:** Farmers can earn from both fish and plants, diversifying income and reducing financial risk.
- Ease of setting up in any terrain, geography or season, since it is a soilless form of agriculture
- **Scalable and Adaptable:** Aquaponics systems can be tailored to fit urban rooftops, backyards, or larger commercial setups.
- **Chemical-Free:** Eliminates the need for synthetic fertilizers and pesticides, producing organic, toxin-free food.
- **Year-Round Production:** Controlled environments allow for continuous farming regardless of season or climate.

### **Environmental benefits include:**

- **Reduced Carbon Footprint:** Local production reduces transportation emissions and reliance on long range logistics.
- Less food miles (local food production) and near-zero carbon footprint.
- No pollution or soil erosion.
- Zero use of fertilizers increasing health benefits



Aquaponics System at Gratitude Farms (Pondicherry) – Italian Basil Plantation Notice the dense growth in just three months



### **Profitable Components of Aquaponics**

**Fish Farming.** Fish are central to an aquaponics system, providing the nutrients required for plant growth. Selecting high-demand, fast-growing fish species ensures profitability.

- **Tilapia:** Hardy, adaptable, and fast-growing, tilapia is one of the most popular choices.
- Catfish: Resilient and well-suited for warmer climates.
- Trout: Ideal for colder regions.
- Ornamental Fish: Koi or goldfish offer premium market opportunities.

**Plant Cultivation:** Leafy greens and herbs thrive in aquaponic systems, offering high margins and quick turnover.

- Lettuce: Fast-growing and always in demand.
- Spinach: A nutritious green with consistent market appeal.
- Basil and Mint: High-value herbs ideal for culinary and medicinal markets.
- Kale: A nutrient-dense superfood commanding premium prices.
- And many more

The range of fruits and vegetables and greens that can be grown in Aquaponics systems is quite vast; however, given its high capex, it makes sense to grow high - value and exotic greens in aquaponics for consistent profitability.

### Why Aquaponics is a Game-Changer

- **Sustainability:** Aquaponics maximizes resource use, ensuring every drop of water and every ounce of fish feed contributes to the ecosystem's productivity.
- **Urban Farming Revolution:** Space-efficient systems make farming viable in cities, reducing the need for large plots of arable land.
- **Eco-Friendly:** Zero discharge systems prevent water pollution, while the absence of synthetic inputs supports biodiversity.
- Food Security: By combining fish and plant production, aquaponics provides a reliable source of protein and vegetables, essential for balanced diets.

### Unit Economics of Aquaponics (Per 1,000 sq. ft/year) - Indicative

- **Setup Costs:** ₹2,00,000-₹2,50,000 (includes fish tanks, grow beds, pumps, and water filtration systems).
- Operating Costs: ₹50,000-₹80,000 (fish feed, electricity, and maintenance).
- **Revenue:** ₹3,50,000-₹4,00,000 (from high-demand fish like tilapia and high value. greens).
- Profit: ₹1,50,000-₹2,00,000 annually.
- Additional ways to increase profitability:
  - Focus on high-margin greens like basil, kale, or microgreens.
  - Target premium markets with organic certifications.
  - Offer agritourism or training workshops to diversify income.



### **Challenges and Solutions**

- **High Initial Investment:** While setup costs can be a barrier, financial assistance through funding can ease the burden.
- **High risk of failure,** at least in the early stages; But once perfected, its benefits far outweigh its costs, particularly in a country like India.
- **Technical Knowledge:** Requires understanding of aquaculture and hydroponics. Training programs and online resources can bridge this gap.
- Market Development: Building local supply chains and establishing direct-toconsumer models ensures consistent demand.

### **Future Prospects of Aquaponics**

As global populations grow and natural resources dwindle, aquaponics offers a sustainable solution to feed the world. Innovations like vertical aquaponics, solar-powered systems, and Al-based monitoring are making this method more accessible and efficient.

#### In Conclusion

Aquaponics is not just a farming technique but a paradigm shift towards sustainable and efficient food production. Its ability to produce fresh, organic food while conserving resources makes it an ideal choice for urban, suburban farmers and entrepreneurs. By adopting aquaponics, you contribute to a greener planet and a healthier lifestyle for future generations.

#### **Note from Author:**

You can watch our YouTube Video on Aquaponics here: <a href="https://www.youtube.com/watch?v=ZEyu5iNwm0k">https://www.youtube.com/watch?v=ZEyu5iNwm0k</a>

Maj VP Sharma is the Co-Founder and CEO of Gratitude Farms, an Agritech Startup working in the space of technology enabled Natural Farming. He is an alumnus of NDA, Khadakwasla. He served in Indian Army (Corps of Signals) for 16 years from 1985 to 2001. From 2001 to 2017, he worked in Telecom / Networking sector during the years of hyper-growth in country. During this period, he worked for Airtel, Ericsson and Nokia Siemens Networks and Cisco Systems in senior positions. In 2017, he left his corporate career and along with three of his close friends to take up social entrepreneurship full-time through two ventures- Gramonnati Trust and Gratitude Farms. His work draws upon 32 years of Military and Corporate experience with an aspiration to create a world-class enterprise that synthesizes the power of discipline, innovation, and technology towards the mission of helping develop one million acres of agricultural land into Natural Farming practice. He lives in Pondicherry. He is an alumnus of IIT Kanpur (M Tech), MCTE, Mhow (B Tech).

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### Theme Article

### **AGRITECH - CALLING A NEW SUNRISE**

BY KRISHNA RAJ NAMBIAR

Ajmer Singh Gill the biggest Arthiya explaining the situation in Punjab during famer crisis. "Tuhanu saadda 2.5% commission disda hai, par saadde kharche kisi nu ni disde (You see our 2.5% commission, but not our expenses),"

-Farmer Agitation Punjab

ITC with nearly Rs. 6 Trillion is one of the 10 largest Market Capital holding company on the Indian Stock markets.

Not many of us would recall Mr. Deveshwar's ITC foray into e-chaupal. It was launched in June 2002 and had a website where the farmer connects with the market nearly directly. The warehouse hub was managed by the same traditional middlemen, now called samyojaks, but with no exploitative power due to the reorganization. Indian Agritech has come a long way now. It was a business initiative of launching a unique web-based page, to link rural farmers via the Internet for procurement of agricultural and aquaculture products. In this venture e-choupal attempted to tackle the challenges posed by Indian agriculture. While the web page initially encompassed like soybeans, wheat, coffee, and prawns.

Later AgroStar founded by Shardul Sheth and Sitanshu Shethcame in 2013, AgroStar offered an app and interactive voice response-based agriculture solutions to farmers. ITC followed up - In 2020, ITC rolled out e-Choupal 4.0 with much larger scope.

#### **E** Chaupal

The programme installs computers with Internet access in rural areas of India to offer farmers up-to-date marketing and agricultural information. The framework was based on Sanchalak the tech trained farmer in a village and Sanyojak the intermediary trader. ITC Limited kiosk with Internet access is run by a sanchalak — a trained farmer. The computer is housed in the sanchalak's house and is linked to the Internet via phone lines or by a VSAT connection. Each installation serves an average of 600 farmers in the surrounding ten villages within about a 5 km radius. The sanchalak bears some operating cost but in return earns a service fee for the e-transactions done through his e-Choupal. The warehouse hub is managed by the same traditional middlemen, now called samyojaks, but with no exploitative power due to the reorganization. These middlemen make up for the lack of infrastructure and fulfill critical jobs like cash disbursement, quantity aggregation, and transportation.



In 2020, ITC rolled out e-Choupal 4.0, that provides farmers with information on weather and markets on a real-time basis. It also advises farmers on crop monitoring and electronic marketing place. It now covers Soybean, Wheat, Rice, Maize, Coffee, Marine Products and Fruits.

There are 6,100 e-Choupals in operation in 35,000 villages in 10 states, viz MP, Haryana, Uttarakhand, UP, Rajasthan, Karnataka, Kerala, Maharashtra, Andhra Pradesh and Tamil Nadu, affecting around 4 million farmers. Given the farming population this is only a tip of the needle of Indian farming community.

### Problem areas of Indian Farming and how Infrastructure and Aritech would help revolutionise.

- Small Land Holdings
- Machinery
- Access to markets
- Genetic Modifications
- Highways logistics Costs equation

Indian farming is typically characterized by fragmented farms, weak infrastructure and the involvement of intermediaries. What they need is empowerment such that the weak and marginalised farmer gain grounds enough to ensure the second generation finds farming a worthwhile occupation.

### Main Aspects of Agriculture in India and Agritech role

Know your soil - Soil in India varies from

- Alluvial Soil Silt deposit from rivers, 40% of land in India. Both Khadar and Bhangar are alluvial soils.
  - Area Punjab UP Bihar and are intensely cultivated wheat, maize, sugarcane, pulses, oilseed, etc. are mainly cultivated.
  - Rich in potash but poor in phosphorus thus Green Manure is better than NPK fertiliser.
- Red and Yellow Soil -Found in Deccan Plateau, Orissa and Chhattisgarh;
   Coverage 19%.
  - The red colour is due to the presence of iron in crystalline and metamorphic rocks. The soil appears yellow when it is in hydrated form.
  - Wheat, cotton, oilseeds, millets, tobacco, and pulses are mainly cultivated in red and yellow soil. Millets are a big draw with LGE foods products (Low Glycaemic index).
  - Soil is deficient in nitrogen, phosphorus and humus, thus Fertiliser NPK sale will be good.
- Black Cotton Soil or Regur Soil; covers 15% of Land in India. Found in Maharashtra, Madhya Pradesh, Gujarat, Andhra Pradesh and some parts of Tamil Nadu; the soil is very deep.
  - Rich in iron, lime, aluminium, magnesium and also contain potassium.
  - However, these soils are deficient in nitrogen, phosphorus and organic matter.



- Cotton, pulses, millets, castor, tobacco, sugarcane, citrus fruits, linseed, etc. are mainly cultivated in black soil
- Commercially rich crops are likely to be seen here with Cotton, Sugarcane, Tobacco, Millets etc.
- Desert Soil. Found in Rajasthan nearly 4.42%. Also called Arid soil- The colour ranges from red to brown.

Other aspects of Agri tech support are :-

- Agricultural inputs Advisory
- Health and Growth
- Agricultural output
- Farm Intelligence
- Agricultural Finance

### Some Agriterch companies in India

- AgroStar AgroStar is an end-to-end solutions provider that is solving three major problems of farmers - limited access to good quality agri inputs, a gap in knowledge and information about scientific farming practices, and a lack of access to the best markets to sell their produce
- BigHaat This Company organises many products under one roof access- Crop Nutrition, Crop Protection, Farm Equipment, Animal Husbandry, Organic farming, Agri Insurance etc.
- **BharatAgri.** A fertilizers and reality firm whose shares have gone up from Rs 19 in 2021 to 74 in dec 2024.
- **Cropin** Cropin Sage, powered by Google's Gemini, is the world's first real-time, generative AI agri-intelligence platform aimed at simplifying decision-making across the global agricultural landscape. It leverages Cropin's expertise in computing agri-intelligence for over a billion acres of land worldwide over the last decade. Cropin Sage is a powerful querying engine that combines deep tech components such as Generative AI, multi-layered global climate data, a global crop knowledge graph, earth observation data, and advanced crop models.
- DeHaat A seed to market platform that helps in
  - Know your soil
  - Agri inputs
  - Advisory
  - Health and Growth
  - Agri output
  - Farm Intelligence
  - Agri Finance



### Rice Bran Oil- Your Business Case File...

## Is it within common reach? How to take on Agritech with a Manufacturing Plant? Could you be a go between in the business, other than the E platforms?

Let's consider anyone going into small scale agri business as a study. For example Rice Bran Oil.

Know the Product. Rice bran oil is the oil extracted from the hard outer brown layer of rice called bran. It is known for its high smoke point of 232 °C (450 °F) and mild flavour, making it suitable for high-temperature cooking methods such as stir frying and deep frying. Incidentally, Coconut oil has a smoke point of 165 degrees Celsius and would be a poor choice for French fries and deep frying. Rice Bran Oil on the other hand with 238 degrees Celsius smoke point thus is popular as a cooking oil in East Asia, the Indian subcontinent, and Southeast Asia including India, Nepal, Bangladesh, Indonesia, Japan, Southern China and Malaysia.

Moreover, Rice bran oil consumption has been found to significantly decrease total cholesterol (TC), LDL-C and triglyceride (TG) levels; Green signal there for health enthusiasts.

### The Business. A rice bran oil business plan should consider the following factors:

- **Location:** Choose a location near rice mills to ensure a steady supply of rice bran. Example the Krishna Godavari basin, near Warangal East of Hyderabad.
- Raw materials: Find reliable suppliers/ Farmers with a history of quality and consistency. Establish an efficient procurement strategy to minimize costs and ensure timely deliveries.
- **Storage:** The raw material is prone to rotting and fungus, invest in solutions to keep rice bran fresh and long-lasting; free of moisture.
- Land: Rent or buy land with enough space for machinery, raw materials, and other related items. Minimum one acre would be required and to cater to farms in the river basin it would be 140-150 km outside the city. You need a camp office in the plant.
- **Production process:** Select the right rice bran oil extraction technology and production process based on your budget and planning capacity. There are two main methods:-
  - Solvent extraction pulls out more oil but might involve chemicals. Propane solvent gives 25% per kg, Iso-propane higher and almost 40% with Hexane. Hexane is difficult to procure.
  - Cold pressing keeps the nutrients but yields less oil. Besides there are processes line degumming, deodorisation de-colourising neutralisation de-waxing etc.
- Plant layout: A small to medium scale rice bran oil plant should include a production hall, storage space, and an office space. A moderate unit should get you 10000 litre per day production; two machines of 500L/hr would do.



The set up would cost about Rs 3 Cr. One would think a 5 Cr loan is manageable from Bank, yes. The story gets complicated here.

- As an example if Rice Bran Oil is going at Rs. 130 per litre then the wholesale value will be fluctuating by 10-20 paisa per day.
- Wholesale market deal in those suppliers who can offload not less than 30-50 KL of Oil. There is thus a storage space required to hold 30-40' 5KL Tankers'.
- The production capacity should be steadily moving and there should be an ability to hold 150 -200 KL of oil till price goes up ever marginally per litre.
- On a momentary rise in market by even 20 paisa a litre, immediately your factory should then release 40 tankers of Oil to the State godown. This calls for the ability to hold on to refined Bran Oil and release it at the right time in 21 days with tie up at the other end to accept your consignment first.
- Agro Oil business is hands-on and delay will find others lined up. And your consignment will return with Rs. 50,000 to a lac lost in unsuccessful round trip on fuel
- This need to hold min 200 KL- 220 KL of product calls for extensive up-scaling of transport management will need more Edible Oil tankers on call.
- Such holding ability will require larger financial outlay as the money from sale has to be churned in back to the purchase of Bran from Farmer who needs Cash down. Say around 5 crore of surplus holding fro market release.
- Bank can Give 5 Cr MSME loan but rest of 5 Cr has to come from your pocket. Here is where partnership and VC / loan friends (pun) lend you a helping hand.
- Provided you invest minimum Rs. 10 Cr the net profit margin for a rice bran oil manufacturer's business plan can be around 10% to 15%.
- All agri business need scale.

#### Conclusion

Agri tech is big business where all large business houses are focusing right now. A brief foray into the sector will bring out the scope in the field. It requires farm level connect and widening of the scope of your enterprise.



Brig Krishna Raj Nambiar Commissioned into the Army in 1987 into the Artillery, he opted for Aviation training and joined Army Aviation as a helicopter pilot. As an Aviator he had extensive operational tenures in the Arunachal, Nagaland and Ladakh including Siachen Glacier and OP Vijay at Dras. He flew for 12 years with 1500 hours of operational flying. He commanded his unit in CT Operations and did a tenure as DS in SC Wing Army War College. Meanwhile in 6 years prior to release, he empowered himself with an M Phil from Panjab University, Chandigarh, an HR qualification, an L.L.B degree and he cleared UGC NET for professor Grade. After 07 years in corporate presently he is vice president in an MNC manufacturing textiles / Flooring and located at Hyderabad. He can be reached at krishnaraj1812@yahoo.com.



## **Knowledge Bytes**

## Seeds of Innovation: How the UAE is Cultivating a Thriving Agritech Ecosystem

BY IQBAL SINGH

#### Introduction

The United Arab Emirates (UAE), a nation synonymous with towering skyscrapers and bustling metropolises, is embarking on a groundbreaking journey to transform its arid landscape into a fertile ground for agricultural innovation. Driven by a potent blend of government support, technological advancements, entrepreneurial zeal, and a burgeoning market, the UAE's agritech sector is poised for exponential growth, offering a compelling model for sustainable food production in challenging environments.

### A Vision Rooted in Necessity

The UAE's commitment to agritech stems from a fundamental need: ensuring food security for its rapidly growing population. With limited arable land and scarce water resources, the nation faces inherent challenges in meeting its food demands. Traditionally, the UAE has relied heavily on food imports, leaving it vulnerable to global market fluctuations and supply chain disruptions. To address this vulnerability, the UAE has embraced agritech as a strategic imperative, aiming to enhance domestic food production, reduce reliance on imports, and establish a resilient and sustainable food system.

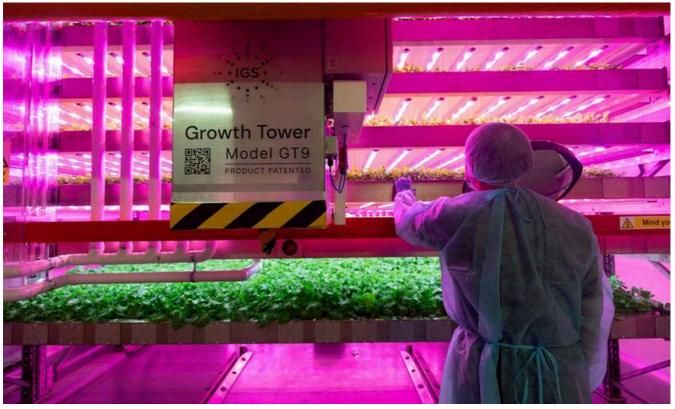
Government initiatives have played a pivotal role in nurturing the agritech ecosystem.

The National Food Security Strategy 2051 sets an ambitious goal for the UAE to become one of the top ten most food-secure countries in the world. This strategy prioritizes sustainable agricultural practices, increased local food production, and ensuring the availability of safe and nutritious food at affordable prices.

• Food Tech Valley: Complementing this national strategy, Dubai's Food Tech Valley stands as a testament to the UAE's commitment to agritech innovation. This ambitious project aims to create a dedicated hub for agritech companies, fostering collaboration, research and development, and attracting global talent and investment.



• **Technological Innovations** - Sowing the Seeds of Transformation: At the heart of the UAE's agritech revolution lies a suite of cutting-edge technologies, each addressing specific challenges and unlocking new possibilities for sustainable food production.



Dubai's Food Tech Valley

- **Vertical Farming:** This innovative approach allows crops to be cultivated in vertically stacked layers, maximizing space utilization and resource efficiency. Vertical farms, often located in urban environments, create controlled environments that optimize growing conditions and minimize the need for land and water. A prime example is the indoor vertical farm in Abu Dhabi's Masdar City, showcasing the potential of this technology to produce fresh, local produce year-round.
- Smart Irrigation Systems: Addressing the critical issue of water scarcity, smart irrigation systems employ sensors, data analytics, and automated controls to deliver precise amounts of water to crops, minimizing wastage and maximizing water use efficiency. This technology not only conserves precious water resources but also optimizes crop yields and reduces environmental impact.
- Drones and Robotics: Automating labour-intensive tasks, drones and robots are being deployed in UAE farms to monitor crop health, apply fertilizers and pesticides, and even perform harvesting operations. This integration of robotics enhances efficiency, reduces labour costs, and minimizes human error, paving the way for more precise and data-driven agricultural practices.



• Al and Blockchain: Harnessing the power of data, Artificial Intelligence (AI) and blockchain technologies are transforming the agritech landscape in the UAE. Al algorithms are being used for predictive analytics, enabling farmers to make informed decisions about planting, harvesting, and resource management, while blockchain enhances supply chain transparency, ensuring traceability and food safety from farm to table.



Vertical Farming

Pic Credit: Freepik

### Entrepreneurial Spirit: Cultivating a Fertile Ground for Innovation

The UAE's agritech sector is characterized by a vibrant entrepreneurial spirit, with startups and established companies alike embracing innovation to address food security challenges and capitalize on market opportunities. Pure Harvest Smart Farms, a pioneering company specializing in high-tech greenhouse technology, exemplifies this entrepreneurial drive. Their innovative approach, using advanced climate control systems, water recycling, and data analytics, has enabled them to produce high-quality fruits and vegetables year-round in the challenging desert environment.

### The success of Pure Harvest highlights the supportive ecosystem that exists for agritech startups in the UAE.

Venture capital firms like Shorooq Partners, recognizing the immense potential of the sector, have been instrumental in providing funding and guidance to startups like Pure Harvest, enabling them to scale their operations and bring their innovations to market.







Pure Harvest is a company that harness the wonders of science, the power of nature and the passion of people to provide the tastiest, affordable, local produce year-round

Mr. Sky Kurtz is the Co-founder and CEO of Pure Harvest Smart Farms, a pioneer in the global Agritech sector. Pure Harvest develops world-leading controlled-environment agriculture (CEA) solutions to deliver the best quality fresh produce all year round. The Company's hybrid growing solutions provide precise climate and environmental controls, enabling



increased productivity and reduced waste (including water, energy, time, & transport) in the harshest climates on earth, with projects spanning the MEASA region.

Prior to founding Pure Harvest, Mr. Kurtz Cofounded Vence – a wearable technology solution for animal protein farming that semi-automates rotational grazing, reinventing livestock management. He also served as a Senior Executive with Francisco Partners, a \$24 billion tech investment firm based in California and an affiliate of Sequoia Capital, a world-leading venture investment firm. Mr. Kurtz invested in and served on the boards of numerous companies across many sectors, with annual turnover ranging from \$25 million to \$2 billion dollars.

Mr. Kurtz was awarded an MBA from the Stanford Graduate School of Business and holds a B.S. in Finance from the W.P. Carey School of Business at ASU, where he graduated Summa Cum Laude and was named the Turken Family Outstanding Graduating Senior (valedictory honour).



### **Cultivating Opportunities: A Sector Ripe for Growth**

The agritech sector in the UAE presents a compelling investment opportunity, driven by several factors:

- Government Support: The UAE government's proactive policies and initiatives, such as the National Food Security Strategy and the establishment of Food Tech Valley, create a favourable environment for agritech businesses. These initiatives provide incentives, funding opportunities, and regulatory frameworks that encourage innovation and attract investment.
- **Growing Market Demand:** With a rising population and increasing awareness of healthy and sustainable food choices, the demand for locally produced, high-quality food in the UAE is experiencing a surge. This demand creates a robust market for agritech companies to cater to, offering significant growth potential.
- **Technological Advancements:** The rapid pace of technological innovation in areas like vertical farming, smart irrigation, robotics, and data analytics continues to drive down costs and enhance the efficiency and productivity of agritech solutions, making them increasingly viable and attractive.
- International Collaboration: The UAE's strategic location and its openness to international collaboration provide agritech companies with access to global expertise, technologies, and markets. The UAE is actively forging partnerships with leading agritech hubs worldwide, fostering knowledge exchange and attracting foreign investment.

### A Sustainable Future: Reaping the Rewards of Innovation

The UAE's investment in agritech extends beyond economic benefits, encompassing a broader vision of environmental sustainability and resource conservation. By embracing technologies that minimize water usage, reduce reliance on pesticides and fertilizers, and promote local food production, the UAE is paving the way for a more sustainable agricultural future. These sustainable practices not only benefit the environment but also enhance the quality and safety of food produced, appealing to consumers who are increasingly conscious of their food choices.



Robots are being extensively used nowadays in agriculture

Pic Credit: Freepik

#### The UAE's Agritech Landscape: A Call to Action

The UAE's agritech sector is brimming with opportunities for entrepreneurs, investors, and anyone seeking to contribute to a more sustainable and food-secure future. The supportive government policies, the rapid pace of technological innovation, the entrepreneurial spirit, and the growing market demand create an ideal environment for success.

The UAE's journey in agritech is a testament to its vision, ambition, and commitment to innovation. By embracing technology, fostering entrepreneurship, and prioritizing sustainability, the UAE is not only addressing its own food security challenges but also inspiring others to explore innovative solutions for a more sustainable and food-secure world. The boundless opportunities in the UAE's agritech sector are a call to action for anyone with a vision for a better future to join this transformative journey.



**Lt Col Iqbal Singh** is a former infantry officer who started his career with The Garhwal Rifles in Dec 1987. He took premature retirement from the Indian Army in 2008 as a Lt Col to pursue a career in the corporate in the technology industry. He is currently working in Google based at Gurgaon. Iqbal is also the Founder of Forces Network – the Network of the military veterans in the corporate.





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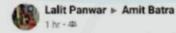




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Connect@abkidslifecoach.com



Hi Everyone.... attended the Amit Batra's webinar on Kids Coaching today and found it extremely useful and powerful session. Shall recommend parents of all kids from 1 yr to 18 yrs to attend and gain the useful insights right from foundation to communication. Great Job Amit....carry on the good work.



Rajiv Ghosh > Amit Batra

Attended a session on parenting by AB, it was quite insightful. Concepts like mentoring your child, setting rules, delegating responsibilities, respecting your child's opinion did invoke my interest and we will definitely implement the same in my daughter's upbringing. Loved the way he explained how right parenting creates an environment which will help the child grow in a positive direction. I highly recommend all parents to attend his webinar.

If you are facing any of the issues with your child SCAN THE CODE BELOW

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# **Knowledge Bytes**

# Plantation Farming in Cardamom Hill, Idukki: A Spotlight on Cardamom and Pepper

BY JOHNNY

"Idukki's undulating landscapes, a picturesque district nestled in the Western Ghats of Kerala is having suitable nutrient-rich soils, and tropical climate provide the perfect conditions for cultivating spices like cardamom and pepper, which have shaped the district's economy and culture over generations."

#### **Farming Practices**

Pepper and green cardamom (small) farming in Idukki are predominantly carried out on undulating terrains and slopes. Farming in Idukki has long relied on traditional practices, many of which are deeply rooted in local knowledge and adapted to the region's distinct terrain and weather patterns. However, modern techniques are increasingly being integrated for better productivity.

**Pepper Farming:** Black pepper, often called the "King of Spices," thrives in Idukki's well-drained red and laterite soils. Farmers grow pepper vines using trees like areca nut or silver oak as live supports, ensuring a symbiotic ecosystem. The Mulching, shade regulation, and pest management play a crucial role in maintaining the health of the vines. There are many varieties which addresses the basic problems of low yield, draught irresistible, size of pepper, etc.

The support trees helps in shade regulation, agro forestry, crop diversification and creating micro climatic conditions within the plantation.

**Cardamom Farming:** Known as the "Queen of Spices," cardamom is cultivated in the cool, shaded conditions of Idukki's evergreen forests. Farmers typically use terraced planting to prevent soil erosion. Organic mulching, drip irrigation, and precision nutrient management are commonly employed to ensure optimal growth and yield. Nowadays, high yielding varieties of cardamom are prevalent across this region.

Both these crops are supplement to each as they have different root structure and nutrients requirement, such that they do not compete in nutrition. These crops are harvested predominantly by traditional method in this region which is largely labour intensive.



#### **Technology Usage and Adaptation**

In recent years, the integration of modern technology, such as advanced irrigation systems and digital tools, has brought about noticeable changes in the way plantation farming is practiced in Idukki.

- Irrigation Systems: Sprinkler irrigation systems have minimized water wastage and ensured consistent moisture levels. The micro sprinklers play major roles during hot and dry climatic days.
- **Soil Testing:** Advanced soil testing kits help farmers analyze soil health and tailor fertilization practices accordingly. These testing are available at region levels and provided by Government agency as well as private labs.
- **Digital Platforms:** Farmers are slowly embracing the technological advances in the knowledge sharing platforms such as by using mobile apps for weather updates, market prices, and pest control information. Also, social media tools are helping farmers to share the knowledge and bring transparency in price of produce and inputs which they require.
- **Mechanization:** Machines for drying have reduced labour dependency and enhanced efficiency. However, more custom mechanization is expected to be available on weeding, harvesting since currently these are highly labour oriented jobs in the plantation.

#### **Challenges**

Despite the advancements, pepper and cardamom farmers face several challenges:

- Climate Change: One of the most pressing challenges for farmers in Idukki is the unpredictability of weather patterns. Erratic rainfall and rising temperatures have disrupted traditional farming cycles, directly affecting crop yield. During Feb-Jun 24, severe drought have significantly reduced the acreage under cultivation resulting in steep price rise.
- Pests and Diseases: Spices are prone to fungal infections like quick wilt (Phytophthora) in pepper and thrips in cardamom, which can cause significant losses. Disease management for these crops especially for cardamom is very crucial as this crops are highly sensitive to pest and diseases.



- Market Fluctuations: Price volatility and competition in the global spice market often leave farmers vulnerable. Idukki remains a dominant producer of small cardamom in India, contributing significantly to both domestic markets and exports.
- Labor Shortages: Plantation farming is labor-intensive, and the rising cost of labor adds to the challenges. Hence, custom mechanization is highly sought in these plantation. As the human resource from areas nearby have reduced significantly has also added significant increase in labour shortage problem.
- **Deforestation:** Expansion of plantations and improper plantation management sometimes leads to ecological imbalances, affecting the long-term sustainability of farming. As the plantation area increased in this region, it also witness increase in animal human conflict and impacting both forest animals and humans of the plantation.

Recent changes in forest rules and newly expanded Srivilliputhur tiger reserve into Idukki district have caused worry and in future may increase animal human conflicts.

#### Agriculturists' Perspectives: Enhancing Farms in a Changing Climate

Agriculturists in Idukki believe that adapting to climate change is crucial to sustaining plantation farming. They propose several innovative strategies to enhance farms and mitigate the impacts of climate change:

- **Diversified Cropping Systems:** Integrating multi-cropping with pepper and cardamom helps stabilize income and improve soil health. Companion planting with fruit trees, coffee, and nut trees can create a microclimate favourable for these spices.
- **Soil and Water Conservation:** Terrace farming, rainwater harvesting, and organic mulching are emphasized to combat soil erosion and water scarcity. Agriculturists recommend using biochar to improve soil fertility and water retention.
- Climate-Resilient Varieties: Developing and promoting pest-resistant and drought-tolerant pepper and cardamom varieties are essential. Research institutes in Kerala are already working on creating such high-yielding, climate-resilient strains.



- Eco-Friendly Pest Management: Encouraging the use of biological pest control, natural fungicides, and neem-based products reduces dependency on chemical pesticides, ensuring long-term ecological balance. The practising of integrated pest management (IPM) is being proposed and adopted by plantations for managing pest in order to be eco friendly and adhere with export requirements.
- **Agroforestry Practices:** Integrating agroforestry with spice farming not only improves biodiversity but also provides shade, regulates temperature, and captures carbon.
- **Digital Tools for Weather Forecasting:** Agriculturists emphasize the importance of leveraging digital platforms for accurate weather predictions, helping farmers plan their activities effectively.

#### **Benefits**

- **Economic Growth:** Pepper and cardamom are high value exports are produce, contributing significantly to the local and national economy.
- **Employment:** Plantation farming provides livelihood opportunities for thousands of families in Idukki.
- **Sustainability:** With the increasing adoption of organic farming practices, the ecological impact is being minimized.
- **Cultural Identity:** The farming of spices is deeply interwoven with the traditions and festivals of the region, preserving its rich cultural heritage.

#### **Future Outlook**

Agriculturists emphasize that combining the time-tested wisdom of traditional farming with advancements in modern agricultural science is key to tackling the region's climate-related. Along with Government support through subsidies, training programs, and climate-resilient infrastructure will further empower farmers. Additionally, community initiatives such as spice Farmer Producing Company (FPC) or cooperatives and spice tourism can provide a sustainable boost to the sector.



#### Conclusion

Pepper and cardamom farming in Idukki is a testament to the district's agricultural prowess. Despite facing several hurdles, the resilience of its farmers, combined with modern technology and sustainable practices, continues to uphold Idukki's reputation as the "Spice Bowl of India". Investing in Idukki's spice farming sector is not just about sustaining agriculture—it's about safeguarding the livelihoods of local communities and protecting a cultural legacy that has defined the region for centuries.

#### **Opportunities for Veterans**

Plantation farming offers a broad spectrum of opportunities encompassing agricultural practices, farm mechanization, trade finance, commodity trading, warehousing, and value-added product development. While presenting significant potential, plantation farming also involves inherent challenges. Therefore, prospective entrants into this sector are strongly encouraged to undertake a comprehensive assessment prior to embarking on any plantation-

related ventures.





Lt Cdr Johnny M (Retd), commissioned on 26 Dec 2011 in SSC Executive branch from Indian Naval Academy. After ab-nitio training and on obtaining of watch keeping certificate, he has served on missile boats, commanded a minor war vessel. As part of service specialisation, he has specialised in NBCD in the year 2016 and served on frontline destroyer and tanker on eastern seaboard. He had the privilege to train on NBCD to eastern seaboard ships as part of his last tenure. Currently, he works with Big 4 company in a project management role and looking after his family farming plantation.



## ForceNetPreneur

Very few veterans take up entrepreneurship in their post military careers. We at the Forces Network wish to change that by showcasing veteran entrepreneurs who have gone to achieve success in their ventures. The aim of this series in not just to celebrate our successes from the veteran community, which unfortunately we do not do enough, but also to inspire others. The ultimate goal is to set up a virtuous self-sustaining cycle of inspiration leading to more veterans taking up entrepreneurship and become job givers rather than job seekers.

#### IN INTERACTION WITH IQBAL SINGH

Maj Madhan Kumar did his BTech (Textile Tech) from Madras University and was working briefly before joining the Officers Training Academy in 2003. He was commissioned to EME Bn, he did a tenure with the Rashtriya Rifles where he was awarded the commendation card also, Post his Army tenure he has worked with reputed companies in Customer Services and Logistics vertical including Coca-Cola, Varun Beverages Ltd (Pepsico Franchise), Nestle India Ltd, Mars Wrigley Confectionery. Post his corporate tenure he started his own as an Entrepreneur.



IQ: Please tell us something about your background prior to joining the OTA and the Army, and your subsequent Army career? the highs and the lows?

**Madhan:** I completed my B. tech in Textile Technology from Chennai and was working as a Management Trainee at ACL, Chennai prior to joining OTA. I was commissioned

from the 77th Course of Officers Training Academy, chennai in 2004. I was commissioned in EME Bn and did my attachment with JAK LI. I have served in state of Jammu and Kashmir and Punjab. During serving in Rastriya Rifles was awarded the Army Commanders Commendation Card.

The High during my Army Tenure were: Northern Army Commanders Commendation in the very first year of service as a Lieutenant, Counter Terrorism operations tenure in the toughest terrains of Doda in Rastriya Rifles.

The lows came as: Facing an injury and becoming a low medical category soldier at the age of 28 which eventually forced me to leave Army.



ROAD LESS TRAVELLED



IQ: You began as a corporate employee. Please share in chronological order the roles and companies in your corporate career? How was the experience working in these companies?

Madhan: In Corporate I started with

1.Coca-Cola, as Fleet Manager, TN (2009-10)

2.Varun Beverages Ltd (Pepsico Franchise), General

Manager, Transportation (2010)

3.Nestle India Ltd, Corporate Procurement Manager (Logistics) (2010-14)

4.Mars Wrigley Confectionery, Head Customer Service & Logistics (2014-18)

5.As a Entrepreneur - 2018 - Till Date





Corporate Recognition



#### IQ: How did you prepare yourself for the Military to Corporate transition?

Madhan: The transition was tough and it was during the peak 2008-09 global recession. After completing my PGCBM from XLRI, Jamshedpur the transition journey looked bleak. I kept my focus on reshaping my CV, networking, connecting with corporates/Consultants through LinkedIn. It was tough and extremely frustrating at time. Finally, I cracked the mantra matching the markets need with what I have in store. Carpet bombing my CV for multiple roles across companies really dint work! I need to build a career and not just land up in a random Job! That worked and finally after 5 rounds of tough interviews & panels I ended up starting my corporate career with Coca-Cola the 10th most popular brand in the world as a fleet manager.

## IQ: You were doing very well as a corporate employee. How did you become an entrepreneur? Please share your journey in detail.

Madhan: Frankly I had no big plans as far as my entrepreneurship journey is concerned. Career in corporates and that too with the 4 best MNC's in the world did shape me as a professional who understands the business nuances especially the finance and to be more specific P&L! The start of this journey was in conventional security domain which focussed on volume-based revenue. Eventually I did 4 major course corrections and have narrowed down my business in 3 specific verticals. In each domain we are trying to carve out a niche for ourselves to sustain and grow! Entrepreneurship changed my attitude towards failure once and for all! It's a long journey in deed! Forces Network was one of the first place I reach out for guidance and support in this journey!

### IQ: While we have heard of organic farming you do natural farming. Explain to us the difference?

#### Madhan: Organic Farming:

- **Minimal Intervention:** Uses natural inputs and processes to preserve soil health and fertility.
- **Permitted Inputs:** Allows the use of organic fertilizers, compost, and certain natural pesticides.
- Focus: Prioritizes soil health, biodiversity, and sustainable practices.

#### **Natural Farming:**

- **Zero Intervention:** Advocates for minimal human intervention, relying on natural `processes like composting, crop rotation, and natural pest control. Even tractors and heavy machineries are not used in the field.
- **No External Inputs:** Rejects the use of any external inputs, one odd time we use organic fertilizers.
- Local Adaptation: Tailors practices to specific local conditions and natural resources.
- **Focus:** Emphasizes self-sufficiency, resilience, and harmony with nature, you create an eco-system and that system does farming for you.
- We have adopted a specific method called **ZERO BUDGET FARMING**



IQ: What are the opportunities in the natural farming space? What are the roles / business ideas that you would suggest that the veterans can take up?

Madhan: Natural Farming has lots of potential especially in Horticulture – Fish Farming-Country Chicken / Goat Farming (read it as a package)

- The above 3 creates an eco-system which is self-sustained without zero dependency on external inputs.
- It mitigates the biggest risk a farmer faces "PRICE DROP / LOW DEMAND"
- Any veteran who has a minimum of 5 acres or on long lease with decent water source can get into this and make it a profitable venture.
- As far as the market is concerned you need to create your own market (Online/ Offline) because these products are purely natural and it demands premium. You don't sell this produce in Mandis!
- Those who don't have a land can get into aggregation model where in you develop expertise in natural farming, make a successful model farm (1000 Sq Yads is enough) and then aggregate farmers, later you can market the same with your own brand. A B`lore-based start-up is now doing 150 Crore of business in < 2 years.
- What to produce and how much to depends on geography, but diversification is the key. Means, you don't plant 100% mango trees in your land! It needs diversification.
- Pure Agro marketing of these natural farming produces and selling it in Gulf & European Markets is another good opportunity to look at. This needs lots of subject matter expertise. Its not buy & sell trade!
- Make a self-sustainable natural farm. This attracts lots of life. Once you have the
  green cover make a village tourism/ eco stay model. One of such eco stay near
  Coimbatore, TN costs 25000/ Day! This is the most lucrative and satisfying business
  model that you can ever make! This too requires focussed, dedicated & long-term
  approach.

**Word of Caution:** Don't ever try to do farming sitting in a metro. You have to be there on ground though not full time!

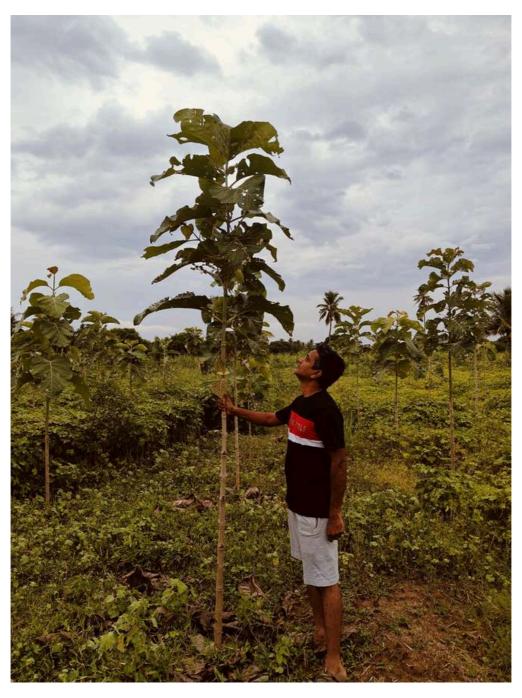
## IQ: Is there a mindset shift required while moving from being an employee to a Business Owner? Can you share the details?

**Madhan:** Business Owner's doesn't think about his monthly salary and life style. He thinks only about the growth of the business and profitability. Its unfair & futile to match your last drawn corporate salary with your monthly business revenue. Lots of months you may draw a blank. This needs lots of persistence and risk appetite. Business needs you to think long term, have a clear vision, Identify key mile stones and finally have a plan & review mechanism to achieve it. Minimal financial security & Mindset to explore is also needed to be business owner.



IQ: How important is it to understand your own passion and expertise and then decide to venture in that space? What are your views on this? How does one identify one's passion?

**Madhan:** Well! From Scientific tools like MBTI, Vedic tools like Astrology, Self-realisation to peer/ family feedback one can narrow down on his/ her passion for sure. It may be in one area or multiple. We have enough individuals in our Forces Network who excel in the field of financial planning to Astrology. Self-evaluation in one thing which I did and my peers did gave their own feedback about me. I was in Logistics throughout my corporate journey but I never ventured into a logistics business! Because the real passion was somewhere else! To create a legacy in farming.



Boyyy you have grown taller than me!!!



## IQ: To be a successful large scale farmer what typical traits from the military must we give up and what must we retain?

Madhan: To be successful follow the below:-

#### Give up:

- Rank first
- Jack of all trade mentality.
- I know it all
- Centralisation of power
- Over delegation

#### **Retain:**

- Time Discipline
- Persistance
- Thirst to learn
- I will live anywhere attitude!

## IQ: What message would you like to give to transitioning military officers who wish to make a career in natural farming?

Madhan: My humble advice is as follows:

- Learn first (Short term courses from Agri Universities, KVK etc & remember YouTube is an ocean)
- Travel a lot and see If success and failure look like in natural farming.
- Decide location, start from the basics (Soil & water testing)
- See how much life the soil as got and decide your wat forwards. A land which is used to artificial fert/pesticides for several years will take a minimum of 3 years to get its natural life back.
- Market study- See what sells best and when. Visit mandi yourselves, participate in auctions.
- Once you decide your product now again go back to field and see the entire life cycle of what you intent to produce. This is key!
- Get the basics right. While sourcing a sampling don't look for L1 (lowest rate), look for the saplings parents!
- Use Agri automation as much as possible. Manpower costs hell!
- Start marketing in Social media.
- Have clear understanding of the eco system (10th std botany book) please revisit.
- Focus on certification. It takes lots of time and effort.
- 3-4 years multiple lessons. Stay put there. You will see the success soon!



# IQ: Tell us about your family including your parents. How did they shape your value system. Also share the role played by your family including spouse in your successful Transition?

**Madhan:** My Father is a retd government servant and a farmer himself at his 80s, coping up with his retirement life, My mother a home maker who keeps pushing me to re start farming and to build a farm house, My elder brother a civil engineer and a real estate builder by profession and a very passionate wanna be farmer helped me a lot in this journey especially in automation / Jugaad



Bakra Bali for our village deity!

#### IQ: What are your future plans in natural farming?

**Madhan:** To make this a self-sustainable natural farm (Model Farm) and on Phase2, is to build a near natural eco stay with guided farm tour. The objective is to promote rural livelihood and make our farm the go to place for those who love NATURE. Phase 3 would be carbon tax credit on commercial front and make this farm a learning gurukul for those who wish to come back to natural farming from across the globe.

#### IQ: What is your company name and what are the product/services you offer?

**Madhan:** Our company name is Trooper India Services Private Limited, We were established in 2014 in Chennai and is a leading provider of civil Engineering and facilities management products & services. We are a client-centric company dedicated to providing best\(\mathbb{I}\)in-class solutions across a wide range of projects. Its a one Stop solution for construction, facilities & office management needs.



In Addition I am also into agri business as mentioned above. My agri business is under name SNA Organiks. We manufacture 100% certified organic fertilizers, Enriched Neem Cake, 100% pure Fish Amino Acid (with Lab certification) and Enriched Organic Vermicompost.

For contact below are the coordinates

Trooper India:

Mobile: 91-99625 88786

Email: ops1@trooperindia.com

**SNA** Organiks

Mobile: 88266 23222

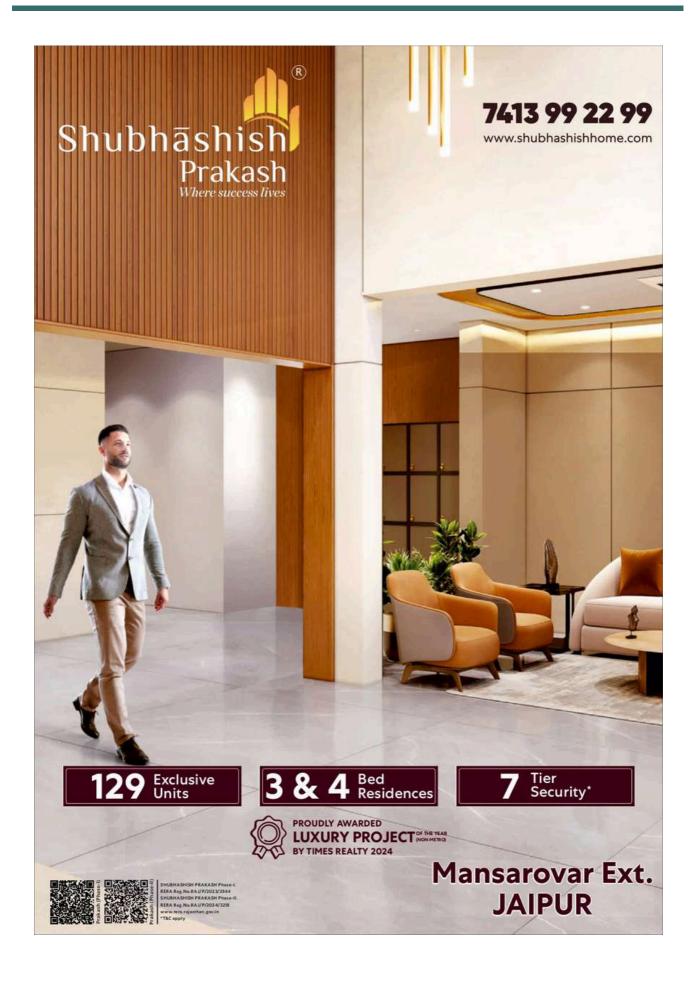
Email: snaorganiks@gmail.com





Lt Col Iqbal Singh (retd) is an infantry officer who started his career with the Garhwal Rifles in Dec 1987. He is currently a senior technology executive with Google based at Gurgaon, India. He is firmly of the belief that tech is an enabler and your friend. He is the Founder of Forces Network – the Network of the military veterans in the corporate. He believes that there are no barriers: all the barriers exist only in one's mind. It was with that firm conviction that Iqbal started the now famous ABCT (Any Body Can Tech) Program in Forces Network in 2019. Under this program non-tech officers were taken to cloud certification level. Over 40 participants got certified from Microsoft in cloud computing under this program. He is convinced that military personnel can easily transition to tech roles with some upskilling.







# **Expatriate Interview**

In this series we plan to showcase the achievements of the members of Forces Network who have settled abroad and carved a niche for themselves through hard work, grit and determination. The aim is to bring to fore the mechanics of such transitions, and thereby quell the apprehensions of the larger community in the Network. Learning from each other would help us exploit our true potential in any part of the World. And, it could be beneficial for our families too.

#### IN INTERACTION WITH IQBAL SINGH

Col Sandeep Shaligram was commissioned in the AAD form the 44th course of Officers Training Academy. Post a successful army tenure and being a graduate of the Tank Technology Course and the Long Gunnery Staff Course, he moved out to the corporate. He currently heads a Group of Hospitals as the Group CEO, in the Oceania region based out of Papua New Guinea.



IQ: Please tell us something about your background prior to joining the OTA/ Academy and the Army, and your subsequent Army career?

**Shaligram:** I belong to Dewas in M.P., was schooled at Bhonsla Military School, St Mary's convent in Dewas and the KV Dewas. I did my BSc, from the Vikram University and was pursuing an MBA from Symbiosis when I left midway to join the Military.

IQ: You were an Army AD officer, you are also an alumnus of the DSSC. You were doing well in the Army and then, you took premature retirement. Explain to us that decision of yours. Now, in hindsight what do you think of that decision?

**Shaligram:** I am grateful for the wisdom to take the decision of exiting uniform, else would have lived with the regret of not having tried. The conditions were favourable, under 45 years of age, children out of school. It was to pursue a full career post serving 25 years in the Army. Incidentally I am also a graduate of the Tank Technology Course and the Long Gunnery Staff Course, leaving at the top of your current career made sense.

IQ: Give us an understanding about your current role and what you are presently engaged in. Also please share in chronological order the roles and companies in your corporate career?

**Shaligram:** I currently head a Group of Hospitals as the Group CEO, in the Oceania region. I also sit on a couple of Boards, including International SOS (niugini) Ltd. Engaged in running hospitals, clinics, medical centres, Pharma and Medical equipment businesses and a medevac vertical. On exiting Army, I worked for ENERCON,GMBH (2nd Largest Wind Energy Company in the world) for a year plus as the business head in Gujrat. Thereafter changed tracks to join as the CEO of Oyster & Pearl Hospitals in Pune. Moved to Papua New Guinea in 2016. Been in the same position since then.





Conducting the visit of Dr Suzuki, then Health Minister of Japan during his visit to PNG

#### IQ: How did you prepare yourself for the Military to Corporate transition?

**Shaligram:** The preparation started well a few years before, immediately on completion of my CO's tenure. Pursued an Executive MBA while in Delhi. Kept abreast with financial and market dynamics of the industry. A deep self-analysis revealed what I should be pursuing post Army. On exiting took a break of six months to seek best options and align to life outside army. The Army teaches you everything, but hardcore finance, did learn that, interpreting balance sheets, P&L statements, Management Accounts.

IQ: Veterans working in senior leadership corporate profiles is not something that one typically associates with most veterans. How did you decide to immigrate and that too to a relatively little known country as Papua New Guinea (PNG)?

**Shaligram:** Veterans have the capability, just need the mind set to function in nonmilitary and multicultural environments. We are used to working in defined and non-defined situations. The decision making in corporate is less complex, however needs to be justified based on procedures, protocols, best practices, and commercial outcomes, which is generally not the case in the military.

Someone reached out to me through a consulting firm that had a brief to seek a leadership position for my organisation. My profile suited the QR, the terms offered were to my satisfaction. The idea of moving to a completely new geography was axiomatic, we had been doing that for 25 years!





Leading the PIH team to set up the first offshore health project on Manus Island

IQ: You are an Air Defence officer now working in a Hospital. Did you have to learn some medical related subjects? How did you do so? What would your advice be to fellow veterans on this front?

**Shaligram:** During my first tenure with hospitals, I did make a great effort to learn everything grassroots upwards, nuances of functioning and operations of the hospitals, variables involved and critical aspects that are typical to hospitals.

At the senior level, it is managing three things, Resources, Personnel and Finances. One has to learn the peculiarities of each sector.

IQ: If you were to Transition from the military to the corporate today with the benefit of all the insights and wisdom that you have gained in the corporate today what would you have done differently?

**Shaligram:** 'There is **'Nothing Wrong'** with the services, it is a distinguished career and most honourable to date. Leave this career only if challenges and growth coming your way stop making you happy anymore. Doing something different, I would have quit at 30, hit the best Ivy League B School and then entered the Corporate, gives you better bragging rights! And a faster path to the C Suite. Well one needs to suit things to the circumstances.

IQ: Any important lessons you learnt while switching jobs and companies in your corporate career? What about the art of graceful exit? Any advice for transitioning military personnel on this front?

**Shaligram:** Yes, to start join structured organisations, that have set protocols and processes, makes things a lot better and defined. Also, it aids your learning curve. Do not hesitate in asking questions, keep a learners mind state always.





Speaking at the International Health Seminar with CEOs of Hinduja, AMRI and Cygnus Ujala Hospitals and Dr Girdhar Giani, Chairman National Health Task force in India.

IQ: How important is it to understand your own passion and expertise and then to work towards upskilling in that domain so as to have a better innings in the corporate? What are your views on this? How does one identify one's passion? Shaligram: The options are to follow your passions or to bank on your expertise, while the latter can be developed, the former needs to be there! Most of us haven't developed that ability and excellence in our passions. To monetise a passion is a difficult path, while pursuing a career based on expertise is easier. You can still keep your passions going. Each one of us has strengths and aptitude in a particular career field.

My advice would be to firstly join a process driven company, most of the MNCs are run that way or a new age Indian company run by professionals. Secondly join a company that earns enough money, they can pay well only if the earn well!. Thirdly remember in a company, there are Cost Centres and Profit Centres.HR, training, security, Quality, PR are cost centres, they cost money to the company and do not bring in primary revenue. By all means if you have aptitude for HR, join a placement company, if you have aptitude for security, join. Security services company, if you have aptitude for training, join a training company, this way you would be the revenue earner and have a prime position in the hierarchy. Lastly do not join companies that have a military hierarchy, they will continue to be rank driven than be merit driven.





## IQ: You have had a long stint in the corporate. To be successful what typical traits from the military must be give up and what must we imbibe?

**Shaligram:** Be proud of your rank and military service, but do not carry it on your sleeve. Be adaptive, and receptive, tolerant of nonmilitary behaviour. Maintain the qualities hallmark of the military, character, sincerity, honesty, hard work, loyalty, camaraderie, courage, believe me these are rare to find. The nonmilitary world does expect you to be better than the usual stuff. Be the Mr. / Ms 'dependable' everyone wants them around. Your work ethos should define you.

## IQ: What message would you like to give to transitioning military officers who wish to make a career as an expatriate in a foreign country?

**Shaligram:** The world is open for you, most of these places are easier to work and live than umpteen military stations. Your employer provides all the facilities and amenities that the military does. Especially the countries other than first world and non metro regions of the developed countries are full of ESM, mostly NCOs, you seldom come across officers. Be open to working in a multi culture, multi ethnicity environment. Do not short sell yourself, every employer needs good people, these are difficult to find and compensation is seldom a barrier.

#### IQ: What are your future plans post-retirement from the corporate career?

**Shaligram:** Post hanging my ties and suits, I plan to be between India and Singapore. Wish to set up a Not for Profit organisation that assists ESM in their second careers. this is a neglected issue in India, it pains to see your NCOs and JCOs working as security guards, while they have immense talent and capability that could find better options. The organisation will identify potential skill gaps, enable bridging these and make a pitch for these guys. they deserve that.





IQ: Tell us about your family including your parents. How did they shape your value system. Also share the role played by your family including spouse in your successful Transition?

**Shaligram:** My parents are both retired, nearing 90s, My mother was a home maker had an early teaching career in fine arts, she is an accomplished painter. My father was a businessman, civil and irrigation construction. They now spend time pursuing their passions of art, music and gardening. Our family values are based on virtues of hard work and sense of purpose. my immediate family is my wife and two boys, all four of us are at least double post graduates. Sapna has had a career teaching science over two decades and later transitioned to Psycho Social counselling. Our children one is a techo a graduate of the MIT and now works in the USA, the younger one is a graduate of Monash Australia and Warwick, UK, works as a journalist. My wife was always a pillar of support in making all my decisions, be it exiting a 25 year career in uniform or to move to Oceania.



Lt Col Iqbal Singh (retd) is an infantry officer who started his career with the Garhwal Rifles in Dec 1987. He is currently a senior technology executive with Google based at Gurgaon, India. He is firmly of the belief that tech is an enabler and your friend. He is the Founder of Forces Network – the Network of the military veterans in the corporate. He believes that there are no barriers: all the barriers exist only in one's mind. It was with that firm conviction that Iqbal started the now famous ABCT (Any Body Can Tech) Program in Forces Network in 2019. Under this program non-tech officers were taken to cloud certification level. Over 40 participants got certified from Microsoft in cloud computing under this program. He is convinced that military personnel can easily transition to tech roles with some upskilling.







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# Moment In Time

We have started with a Photography section "Moment in Time" to provide an outlet for creative side of our esteemed members. The rules for submission are as under:-

- 1. Forces Network members, spouses and their wards can submit images for publication.
- 2. No Nudity or Porn.
- 3. No mention of Mil establishments or unit identity or tac numbers or tail numbers.
- 4.It's a photography section so no images of various get togethers and social functions will be published.
- 5. The longer side of image should be 2048 pixels.
- 6. Maximum 5 images will be published every month. The images must be submitted by 20th of every month.
- 7. Mention your Instagram ID.
- 8. While submitting the following details be submitted along with the suitable Title:-
- a. Aperture
- b. Shutter speed
- c. ISO
- d. Camera used
- e. Lens
- f. Focal length.
- g. In case of a mobile click, the same may please be mentioned.

All Photos may please be sent to forcesnetworkz@gmail.com by 20th of every month.







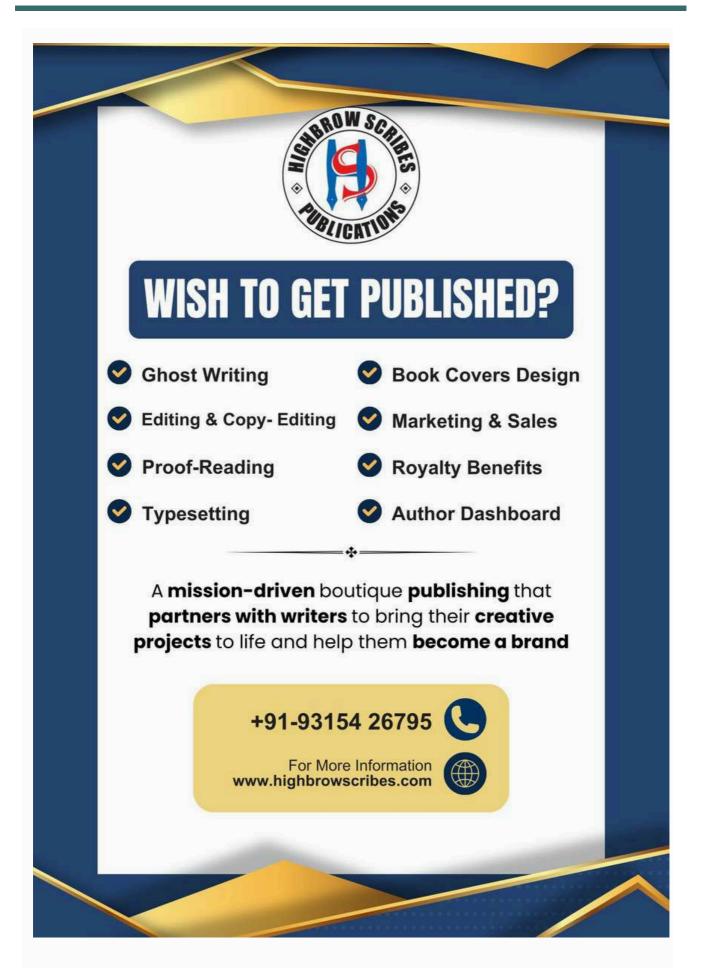
My Music...My Life...My Dream Dont need your pity..

By Col Dinesh Dutt Sharma



With The Sun On My Wings Ready To Soar Above Earthly Things
By Col Dinesh Dutt Sharma



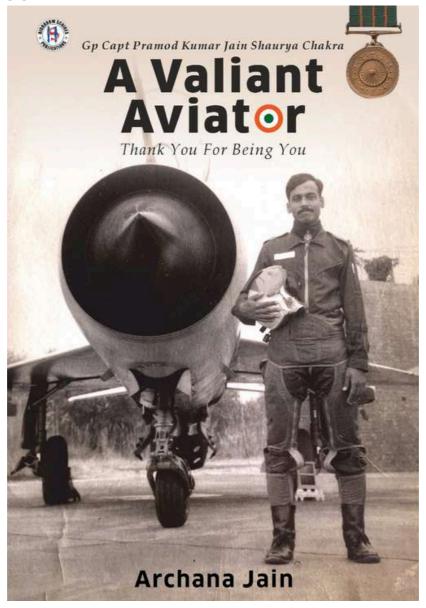




# **Book Review**

### A Valiant Aviator - Thank you for being you

BY SAMEER GUDHATE



Have you ever held a book and felt like it was speaking directly to your soul? That's exactly how I felt with A Valiant Aviator by Archana Jain. Growing up in a household where my father proudly served in the Indian Air Force before transitioning to the Reserve Bank of India, tales of bravery and sacrifice were part of my everyday life. I used to sit wide-eyed as my dad recounted stories of his time in the service—the camaraderie, the challenges, and the immense pride of wearing the uniform. Like many kids, I dreamed of donning the olive green myself, fueled by a mix of admiration and a desire to contribute to something greater than myself. Reading this memoir was like stepping back into those cherished moments, reliving a part of my own aspirations while gaining a deeper understanding of the extraordinary lives of our armed forces personnel.



At its core, A Valiant Aviator is a love letter—one written not just to a husband but to a life of courage, resilience, and honor. Archana Jain invites us into the world of her late husband, Group Captain Pramod Kumar Jain, a fighter pilot whose achievements were nothing short of legendary. The book traces his journey from his early days in the cockpit to his later years as a civil aviator, highlighting not just his professional milestones but also the quieter, more personal moments of his life.

What sets this story apart is how it intertwines the adrenaline-pumping adventures of an air warrior with the tender, human side of his character. Pramod's daring missions, including a heroic rescue of a crisis-stricken aircraft, are juxtaposed with stories of his love for his family, his friendships, and his unwavering integrity. The way Archana captures these dual facets of his life makes the book deeply relatable, even to those of us who've never stepped foot in a fighter jet.

What makes this book truly stand out is Archana's writing. It doesn't feel like you're reading a biography; it feels like you're sitting with a close friend, listening to them recount their most cherished memories. Her prose is warm and inviting, striking the perfect balance between technical details and emotional depth. Archana's vivid descriptions make you feel as though you're right there—whether it's in the cockpit during a tense mission or at home, witnessing a quiet family moment.

The book's narrative voice is personal and heartfelt, which isn't surprising given that this is a deeply personal story for Archana. You can sense the love and respect she has for Pramod in every word, and that sincerity is what keeps you hooked from start to finish.

Group Captain Jain emerges as a multi-dimensional figure in this memoir. He's not just a decorated fighter pilot with accolades like the Shaurya Chakra; he's also a loving husband, a devoted father, and a steadfast friend. Archana doesn't shy away from showing his vulnerabilities alongside his strengths, which makes him all the more relatable.

The book also highlights the resilience of the families who stand behind these heroes. As someone who's seen this resilience firsthand through my dad and the stories of his colleagues, I found this aspect of the book especially poignant. It's a reminder that while soldiers fight battles on the front lines, their families often fight quieter battles at home.

The structure of the book flows seamlessly, much like a well-told story. Archana takes us through Pramod's life in a way that feels natural and engaging. The pacing is just right—there's enough detail to immerse you in the world of the Indian Air Force without overwhelming you with information.



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What I particularly appreciated were the anecdotes sprinkled throughout the narrative. These little stories—of Pramod mentoring young pilots, of his calm unwavering under pressure, of the joy he found in simple family moments—add layers to the story, making it more than just a recounting of events.

Courage, love, and legacy are the beating heart of this book. But it's also about so much more-about the sacrifices made by those in uniform, the strength of the families who support them, and the idea that true heroism lies not just grand gestures but in everyday acts of integrity and kindness.

For me, the book also touched

on the idea of finding purpose and leaving behind a legacy. It made me reflect on my own dreams of serving in the armed forces and the values my dad instilled in mevalues that continue to guide me even today.

Few books have moved me the way A Valiant Aviator did. There were moments that made me smile, moments that brought tears to my eyes, and moments that left me in awe of the life Pramod and Archana shared. It's impossible not to feel inspired by their story.

One scene that particularly stayed with me was Archana's description of Pramod's calm demeanor during a life-threatening crisis. It reminded me of my dad's stories about how the Air Force taught him to remain composed under pressure—a lesson that, even now, feels relevant in everyday life.

The biggest strength of this book is its authenticity. Archana's heartfelt writing makes you feel connected to her story, while the detailed anecdotes bring Pramod's character to life. The illustrations are another highlight, adding a visual dimension that complements the narrative beautifully.





If I had to point out a weakness, it would be that some of the aviation jargon might feel a bit dense for readers unfamiliar with the field. However, it's a minor quibble in an otherwise stellar book.

Reading A Valiant Aviator felt like reconnecting with my own roots. It reminded me of the pride I felt every time my dad shared his Air Force stories and reinforced my admiration for the men and women who dedicate their lives to serving our nation.

In the end, A Valiant Aviator is more than just a book—it's a celebration of a life well-lived, a tribute to courage and love, and a testament to the indomitable spirit of those who dare to dream and fly. Archana Jain's heartfelt memoir is a must-read for anyone who loves stories of heroism, resilience, and humanity. I highly recommend it—and I can't wait to see what she writes next.



Sameer Gudhate is a poet, author, and proud book lover whose passion for words led him to achieve a world record: reviewing 365 books in 365 days. His writings, filled with heart and insight, have found a place in national and international journals, newspapers, and anthologies. A basketball enthusiast and a hands-on dad, Sameer is on a mission to spark his daughter's love for reading. Whether he's penning poetry or simply connecting with fellow bookworms, Sameer brings warmth, authenticity, and a deep love for storytelling to everything he does.

## Please provide your invaluable opinion/feedback on this Book review, by clicking/tapping <u>HERE</u> - Editor







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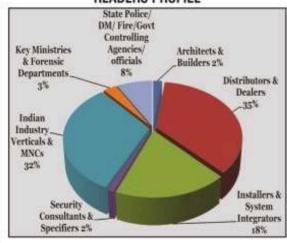
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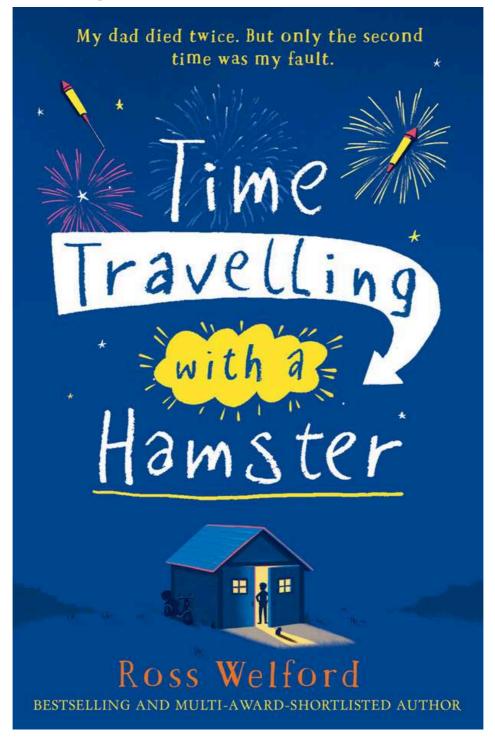
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# **Book Review**

### **Time Travelling with a Hamster**

BY ARYAMAN KASHYAP



I Bought the book with a clear thought in my head: "Read the book like its speaking to me" Which is why the book got finished in 2-3 days. My dad said I could finish a Harry Potter book in 3 days. Also, congrats to Ross on his success as a bestselling children's author. But let's cut to the chase now.



The book's cover had already told me that this was going to have many twists and turns in it. When I read it, I was surprised that the main character's name was a bit like an Indian name! His name was Al Chaudhury. In fact, almost all characters were Indian themed. The book's key line was that his dad died 2 times but only the second time was his fault. The book's gripping suspense just makes the time fly. The most shocking thing was that he tried to save his dad from dying by going back in time with his hamster named Alan Shearer, and even crazier was that his time machine was not like a rocket or anything like that, but it was a zinc tub with a MacBook laptop. Shocking, right a zinc tub breaking the laws of physics. Plus, there were many references to mathematical equation. Like his dad's name was Pythagoras Chaudhury. His nickname was pi which is like the sign π.Even though I have only 2 books of Ross Welford, they both have told me he's going to be the next big thing in the world of books. If you're wondering how many best wishes I'm sending Ross, here is the number:∞. If you are looking for a book for your children, I'd recommend this book.

**About the Author:** Ross Welford was a magazine journalist and television producer in the UK before becoming an author. Time Travelling With A Hamster was his first book, and was nominated for every major award in children's books, winning the Awesome Book Award in 2017. It was followed by a second book, What Not To Do If You Turn Invisible. A new, standalone book has followed every year since, all achieving critical and popular acclaim, and frequently gaining best-seller status. Ross is firmly established as one of the UK's most popular and original voices in children's books.





Honorable mention: Capt Uday K Shriwas

Halo I am Aryaman Kashyap and presently studying in class IV in Bishops School Camp, Pune. Reading has been a wonderful time and it has been a great indulgence. Football and Cricket are my favorite sports and Messi to me is GOAT. Well I have also seen the Movie 83 ....hmm Let me Guess... 50 times ©.

Please provide your invaluable opinion/feedback on this Book review, by clicking/tapping HERE - Editor





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