

GUEST COLUMN

# Mari-tech eco parks can be India's pathway to sustainable global marine food hub



Shaji Baby John

Imagine a model of world-class eco-friendly aquaculture infrastructure that could be replicated across the globe with the necessary tweaking to suit the agro-climatic conditions in specific regions. The Kings Mari-Tech Eco Park, a work in progress at Toothukudi in Tamil Nadu, is such an entity with the potential to transform India into a global marine food hub. The project borne out of over four decades of expertise in integrated semi-intensive aquaculture, marine food processing and export is designed to meet the challenges of ensuring healthy and

quality protein to a burgeoning population even as global warming threatens to disrupt many of the prevailing farming practices.

**Game changers**  
Kings Infra Ventures has zeroed in on the concept of integrated mari-culture tech-park after taking into consideration the evolving macro and micro level ecosystem marked by ecological, economic, and livelihood challenges facing the society. The priority according to our perspective would be the creation of the infrastructure for the ecological, social, and economic sustainability in the aquaculture industry. The need for combating global warming and climate change while creating carbon-negative food production systems leaves us with no option other than to look for innovative solutions. The concept of carbon-negative food production has to be reinforced with the idea of creating high-quality and healthy protein to sustain the requirements of a growing global population. Aquaculture has been identified as an important source for meeting the growing demand for high-

quality protein in a socially and economically sustainable manner.

**Global warming**  
The increase in average surface temperature leading to global warming and climate change is posing a grave threat to the existing ecosystem as a whole. The series of research findings by reputed global institutions show that the fall-out from global warming needs to be addressed on a priority basis. Environment-friendly and carbon-negative food production has been identified as a major instrument in combating the ill effects of global warming. Aquaculture would have a major role in the development of a carbon-negative food production system filled with healthy proteins. The rampant use of pesticides and antibiotics in food production is another cause of worry. The antibiotic and other chemical residuals in the food chain are posing health hazards to humans and the environment. The introduction of symbiotic farming practice is one of the methods to move away from harmful farming practices using antibiotics and chemical

pesticides. The focus of symbiotic farming based on eco-friendly and sustainable practices envisages a high-quality food production system with end-to-end traceability using the potentials inherent in artificial intelligence, the internet of things and blockchain technologies.

**Futuristic model**  
The mari-culture tech park conceived and developed by our company proposes a futuristic model that could be replicated and adapted across the world. The integrated park is designed to mimic the natural marine system in the food production cycle. The Eco Mari-Culture Units (EMU), the core component of the park, are the basic food production module involved in the farming of shrimps and other aquaculture species. The EMUs, a closed-loop farming system, are dedicated to sustainable practices fitted with plug and play modules. The entire system is subjected to 24/7 monitoring by the built-in system using information technology tools. The project conceives each EMU as an integrated system of multiple

technologies and sustainable practices such as the Recirculating Aquaculture Systems (RAS) Biofloc System, System Automation, AI and IoT, design optimisation and advanced monitoring.

**Farmer producer organisations**  
Farmer Producer Organisations (FPOs) are another pillar of the project. FPOs would be provided with end-to-end solutions and services in shrimp farming. The plan is to create a network of 10,000 aqua entrepreneurs across the country and handhold them to this game-changing platform of integrated eco-friendly and sustainable food production systems. The project also has a dedicated division to support eligible entrepreneurs on the benefit of the schemes and facilities provided by central and state governments in the fisheries and marine products sector.

**Solar power**  
The setting up of solar power is another highlight of the project. Closed-loop indoor farming is a power-intensive

system due to the need for maintaining oxygen supply continuously to the farming tanks. Rooftop solar panels could be installed in the indoor facilities to generate the required green power. The green power generated could be consumed during the day while the storage devices take care of requirements at night. The surplus power would be utilised for other units within the tech-park.

**Paradigm change**  
The fully integrated mari-culture tech park project has the potential to herald a completely nature-friendly system of aquaculture farming practice across the globe. The project blends well with the blue economy initiatives of the Union and State governments. The ecological, social and economic impacts of the project could be

articulated in the following manner. Ecological impact: (i) Carbon-negative food production system with 99 per cent water recycling and support to the local flora and fauna. (ii) Bio-fencing ensures that no adverse impact of any kind would be felt by the surrounding environment. Social impact: Formation of FPOs, food security, the creation of agri-aqua entrepreneurs, a transparent system to channel government schemes and subsidies to the intended population and the involvement of more women in the workforce are some of the key elements of social impact. Economic impact: Benefits accruing to a section of people belonging to the bottom of the income pyramid with the project opening new opportunities for members of the coastal communities. Stable and predictable economic returns leading to informed financial planning would be another important benefit. Employment and infrastructure development opportunities and an online system of procurement would further improve the economic empowerment of the coastal

community. The investor's community would have a good opportunity to be stakeholders in the venture with the possibility of steady and assured returns. The company would be pursuing a Public-Private-Partnership model with the support of State governments to set up integrated mari-culture ventures in different parts of the country. The huge stretches of salinity-affected and degraded land lying idle without much scope for productive farming in states like Tamil Nadu, Gujarat and Rajasthan could be converted into integrated parks for aquaculture. As I have stated earlier the project could be replicated anywhere in the world. The success of the venture, expected to be displayed sooner than later, has all the potential to place India as a global hub of healthy and protein-rich high-quality marine food products. (The author is the chairman of Kings Infra Ventures Limited who also writes on the blue economy and sustainable food production system. Views expressed are personal)

## CM Dhama inaugurates U'khand Science & Technology Congress

PNS ■ DEHRADUN

Chief minister Pushkar Singh Dhama inaugurated the 15-16th Uttarakhand State Science and Technology Congress in Graphic Era University on Wednesday. In his address he expressed confidence that the programme would help in paving the way forward for science and technology in the state. He added that it is our collective responsibility that the crux coming out of deliberations in such programmes should get manifested in the form of advanced technology for the benefit of the state and the country. The CM said that the country has set new records in the field of science and technology under the leadership of Prime Minister Narendra Modi in the last eight years. He said that the new education policy implemented in the country has been prepared while keeping every issue in focus. Lauding the efforts of the scientists in the recent pandemic of Covid-19, Dhama said that under the leadership of PM Modi our scientists developed two vaccines in the country. He exhorted the scientists and research scholars present



in the programme to move ahead with grit and determination. He also sought suggestions from the scientific and academic fraternity in the field of science and technology so that a roadmap can be created for making Uttarakhand a leading state of the country till the year 2025. Dhama said that the state government is preparing a roadmap for the development of the state by seeking suggestions from every department. In the programme the Information Technology secretary Sovjanya gave a detailed account about the objectives of the science Congress. The programme is organised every

year by the Uttarakhand State Council for Science and Technology (UCOST) but due to the pandemic of Covid-19, the Congress could not be convened. This year the 15th and 16th Congress are being organised jointly. The director general of UCOST, Rajendra Dobhal gave a presentation on the works undertaken by the council and the Science City. The chairman of the Graphic Era group Kamal Ghansala presented the vote of thanks. The programme was attended by the scientists, teachers and research scholars of different universities and institutes.

## Minister Rawat cancels all attachments in Cooperatives Dept



PNS ■ DEHRADUN

In a major decision the Uttarakhand government has cancelled all the attachments in the Cooperatives department of the State. Large numbers of the employees of the department were attached in the cooperative headquarters and the offices located in the plain areas of the State on the basis of their connections. On the directive of the Health, Education and Cooperatives minister Dhan Singh Rawat, the registrar of cooperative societies, Alok Pandey released the order for cancellation of all attachments in the department on Tuesday. The order created a storm in the department and was the talking point on Wednesday. More than 40 officers and employees of the department are coming under the effect of the order and they would now have to join their original place of posting. In the order Pandey has said that all the new assistant registrar, cooperative inspector category I and category II should be appointed at the block and Tehsil level.

**MARKETS**  
SENSEX 51,822.53 (-709.54)  
NIFTY 15,413.30 (-225.50)  
GOLD 15,413.30 (+129.00)  
SILVER 60,623.00 (-648.00)

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In my army documents my son's incorrect name Subham Kumar has been recorded whereas his correct name is **Shubham Kumar**.  
Army No JC342582L Sub. Kundan Kumar S/o Devendra Sharma, Village-Pitwans, Post office-Pitwans, District -Patna State-Bihar, Pin 804452

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**INDIAN COUNCIL OF MEDICAL RESEARCH V.Ramalingaswami Bhavan, New Delhi**  
Adv. No. ICMR/Rectt./Sc-C/2022/4-Pers.  
**MISSION MODE RECRUITMENT NOTICE FOR SCIENTIFIC POSITIONS UNDER ICMR HQRS AND ITS INSTITUTES/CENTRE**

Indian Council of Medical Research (ICMR), an Autonomous Organization under Department of Health Research, Ministry of Health & Family Welfare, invites online application(s) up to **18<sup>th</sup> July, 2022 till 5:30 PM** for recruitment to the vacancies of **Scientist-C in the Pay Level-11 Rs.67,700-Rs.2,08,700 (pre-revised Grade pay-Rs.6600/-)** from Indian Citizens, with the following specialization:-

| Sl. No. | Specialization           | No. of Vacancies |
|---------|--------------------------|------------------|
| 1.      | Biostatistics/Statistics | 28               |
| 2.      | Bio-Informatics          | 08               |
| 3.      | IT/Computer Sciences     | 04               |

For detailed advertisement, please visit ICMR website at <https://recruit.icmr.org.in> (Jagdish Rajesh)  
Dwpt 17152/12/0013/2223 Assistant Director General (Admin)

**PUBLIC NOTICE FOR PAYMENT UNDER RESOLUTION PLAN**

All the employees/workmen/operational creditors/Stakeholders are aware that a resolution plan was approved by Hon'ble NCLT, Mumbai for M/S Shirdi Industries Limited vide its order dated 12/12/2017 wherein besides other balances, EPF, ESIC, Leave Encashment, Gratuity amounts pertaining to workmen and employees and balance amounts pertaining to irregular operational creditors which were due and payable as on 12.12.2017 were resolved. In accordance with the resolution plan 100% of EPF, ESIC, Leave Encashment, Gratuity and 15% of balance amount payable to irregular operational creditors is to be paid in 8 quarterly installments commencing from quarter ending on 30.06.2022 and till 31.03.2024. Accordingly, all concerned persons are hereby informed as under:

**A: Employees and Workmen whose employment has ended**  
1. The EPF and ESIC contributions shall be deposited by the Company in accordance with the plan with the respective Authorities. Leave encashment and gratuity amounts shall be paid in their bank accounts.  
2. All are requested to provide their latest residential address along with Bank account, PF account and ESIC account details to enable the Company to make the payment in their confirmed and proper accounts.  
3. All are also requested to complete the relieving procedure (if not already done) prior to payments. All instalments of their legal dues (which will become payable upon their completion of relieving procedure) shall be paid upon such completion.  
4. The existing employees/workmen are also requested to inform the concerned ex-employee/ex-workmen if they are in contact to expedite.

**B: Operational Creditors** are requested to share the ledger of account, balance as on 18/05/2017, 12/12/2017 and as on date along with their latest bank account details.  
C: Information can be submitted either in person and acknowledgment is taken form authorized person of the company for collection of such information or by mail on email id: [bk.nath@asindia.com](mailto:bk.nath@asindia.com)

This Public notice is also available on: [https://www.asindia.com/wp-content/uploads/2022/06/Public\\_Notice\\_for\\_payment\\_210622.pdf](https://www.asindia.com/wp-content/uploads/2022/06/Public_Notice_for_payment_210622.pdf)

For Shirdi Industries Limited SD  
B.K.Nath  
Authorized Signatory  
Date:21/06/2022

**NORTHERN RAILWAY**  
Tender Notice  
Invitation of Tender through E-Procurement System  
Senior Divisional Materials Manager, Northern Railway, Moradabad-244001 for and behalf of the President of India, Invites tender through E-procurement system for the supply of the below item.

| Sr. No. | Tender No. | Description   | Qty. | Earnest Money in Rs. | Estimated Value in Rs. | Due Date |
|---------|------------|---|------|----------------------|------------------------|----------|
| 01      | 97225274   | SUPPLY, INSTALLATION AND COMMISSIONING OF UNIVERSAL FAIL SAFE BLOCK INTERFACE (UFSBI) FOR SINGLE LINE OPERATION AS PER RDSO SPN NO IRS: S-105/2012..... | 06   | 1,43,770/-           | 71,88,366/-            | 13.07.22 |

Note:- Above tender with detailed description are upload on IREPS website i.e. [www.ireps.gov.in](http://www.ireps.gov.in). The firm who desires to participate against E-tender are advised to electronically register themselves on the above website for which they would require to have a Class III digital signature certificate from certifying agencies authorized under IT Act 2000 by Govt. of India. Manual offers against E-Tender shall not be accepted.  
No.: 07/Sr.DMM/MB/2022 Dated.: 21.06.2022 1519/2022

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**केनरा बैंक Canara Bank**  
(A Govt. of India Undertaking)

**Annexure XXX**  
Draft of Auction Sale Notice for Publication of Auction Sale Notice for publication in the News Paper  
(SAHASDHARA ROAD BRANCH CANARA BANK)  
The under mentioned persons are hereby informed that they have failed to pay off the liability in the loan accounts. Notices sent to them by Registered Post have been returned undelivered. To the Bank. They are therefore requested to pay off the liability and other charges and redeem the pledged securities on or before 17.06.2022 (date) failing which the said securities will be sold by the Bank in public auction on 27.06.2022 at the cost of the borrower at the Bank's premises at 4:00 P.M. on or on any other convenient date thereafter without further notice, at the absolute discretion of the Bank.

| Sr No. | Date Of Loan | Loan Number    | Name & Address of Borrower   |
|--------|--------------|----------------|--|
| 1      | 29.09.2020   | 89419510000103 | Prem Chandra S/o Ram Prakash H No. 128 Block F, East Vinod Nagar, East Delhi |

DATE: 22.06.2022  
NOTE: Amount outstanding should include all liabilities of the party under Gold Loans as well as any other loan/credit facility

**NORTHERN RAILWAY**  
Auction Notice  
Auction of Lot No. 1 KM (1323/19-21 से 1330/1-3) 95 Nos. Lot No. 2, KM (1339/23-25 से 1344/5-7) 389 Nos & Lot No. 3 Km (1298/18-20 To 1320/18-20) 113 Nos. Dangerous trees under Assistant Divisional Engineer/Northern Railway Bareilly will be auctioned in the office of Assistant Divisional Engineer/Northern Railway Bareilly. All the interested bidders are invited to participate in this auction.

Auction place:- Office of the Assistant Divisional Engineer/Northern Railway/Bareilly on date 15.07.2022 at 11:00 AM

- All the bidders will deposit cash Rs 100/- in the office of Assistant Divisional Engineer/Northern Railway/Bareilly which will not be refunded and shall also deposit Rs 8000/- in favor of Sr. Divisional Finance Manager Northern Railway Moradabad as a Demand Draft of SBI or Other Nationalized Bank.
- All the bidders who will take part in the auction will also have proper knowledge of Auction rules and others allowances.
- Successful bidders will deposit the Demand Draft of SBI or Other Nationalized Bank in favour of Sr. DFM/MB or station earning in cash on same day with following rate:-  
a 10% amount of selling price or minimum amount Rs 25,000/- whichever is maximum on purchase of more than Rs 1,00,000/-  
b Balance amount will be deposited within 10 days including the date of auction  
c GST @ 18 % will be deposited on total cost within 10 days including the date of auction
- The work should be completed within 60 days including the date of auction.
- Railway has right to close the work any time. In this situation the balance amount will be returned without interest.
- Complete Details of tree with locations will be available in the Divisional Office Moradabad.
- Bidders are requested to quote their rates according to the tree locations.
- Trees will be delivered and handed over in the presence of SSE/works, ISA and RPF.
- If the balance amount is not deposited within 10 days including the date of auction, then initial deposited amount will be forfeited.
- Bidders will not make any Kutcha/Pakka construction in the land of Railway.
- Bid will not be quoted below the base price.
- Demand draft will be deposited in the office of Assistant Divisional Engineer/Northern Railway/ Bareilly from 09.00 am to 10.30 AM. After that no demand draft will be accepted.
- The approval of tree cutting must be taken from the Forest Department by the buyer. Tree cutting charges will have to be borne by the buyer himself only as per the charges given below. Tree cutting approval will be given by this office after submission of receipt fee paid to Forest Department to the Division.

Note: Each lot will be auctioned separately.  
No S/W/A/TREES/STORE/22-23 Dated - 22.06.2022 1527/2022

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**NORTHERN RAILWAY**  
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Invitation of Tender through E-Procurement System  
Senior Divisional Materials Manager, Northern Railway, Moradabad-244001 for and behalf of the president of India, Invites tender through E-procurement system for the supply of the below item.

| Sr. No. | Tender No. | Description  | Qty.   | Earnest Money in Rs. | Estimated Value in Rs. | Due Date   |
|---------|------------|--|--------|----------------------|------------------------|------------|
| 1       | 97225454   | SUPPLY, INSTALLATION, WIRING, TESTING & COMMISSIONING OF SSDAC AS PER RDSO SPEC NO. RDSO/SPN/177/2012 VER 3. PAYMENT OF INSTALLATION SHALL BE MADE ONLY AFTER SUBMISSION OF CHECKLIST OF INSTALLATION OF SSDAC....   | 8 Nos. | 84050                | 4202595.92             | 18.07.2022 |
| 2       | 97225453   | SUPPLY, INSTALLATION, WIRING, TESTING & COMMISSIONING OF SSDAC AS PER RDSO SPEC NO. RDSO/SPN/177/2012 VER 3. PAYMENT OF INSTALLATION SHALL BE MADE ONLY AFTER SUBMISSION OF CHECKLIST OF INSTALLATION OF SSDAC....   | 8 Set. | 84050                | 4202595.92             | 20.07.2022 |
| 3       | 97229003   | SUPPLY OF MULTI SECTION DIGITAL AXLE COUNTER SYSTEM (MSDAC) INCLUDING THE CENTRAL EVALUATOR/PROCESSOR(S), FINAL TRACK CLEARANCE RELAY FOR EACH SECTION DETECTION POINTS, MUSHROOM HOUSING FOR TRACK SIDE ELECTRONIC EQUIPMENT WITH COMPLETE ASSEMBLY AND FIXING ARRANGEMENTS FOR EACH DETECTION POINTS AND ALL OTHER ACCESSORIES FULLY EQUIPPED FOR 10 DETECTION POINTS AND TO CATER FOR 08 TRACK SECTIONS AS PER RDSO SPECS RDSO/SPN/176/2005 (VER.2) OR LATEST.... | 1 Nos. | 85290                | 4264311.08             | 12.07.2022 |
| 4       | 97225457   | SUPPLY, INSTALLATION, WIRING, TESTING & COMMISSIONING OF SSDAC AS PER RDSO SPEC NO. RDSO/SPN/177/2012 VER 3. PAYMENT OF INSTALLATION SHALL BE MADE ONLY AFTER SUBMISSION OF CHECKLIST OF INSTALLATION OF SSDAC....   | 6 Set. | 63040                | 3151946.94             | 15.07.2022 |
| 5       | 97225456   | SUPPLY OF MULTI SECTION DIGITAL AXLE COUNTER SYSTEM (MSDAC) INCLUDING THE CENTRAL EVALUATOR/PROCESSOR(S), FINAL TRACK CLEARANCE RELAY FOR EACH SECTION DETECTION POINTS, MUSHROOM HOUSING FOR TRACK SIDE ELECTRONIC EQUIPMENT WITH COMPLETE ASSEMBLY AND FIXING....  | 1 Nos. | 85950                | 4297345.14             | 19.07.2022 |

Note :- Above tender with detailed description are upload on IREPS website i.e. [www.ireps.gov.in](http://www.ireps.gov.in). The firm who desires to participate against E-Tender are advised to electronically register themselves on the above website for which they would require to have a Class III digital signature certificate from certifying agencies authorized under IT Act 2000 by Govt. of India. Manual offers against E-Tender shall not be accepted. Tender Notice No. 02/Sr.DMM/MB/2022 Dated 21.06.2022 1520/2022

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