The Incredible Journey of a Unique Organization

INHANA ORGANIC RESEARCH FOUNDATION (IORF)

The incredible journey of IORF

"Accomplishments will prove to be a journey, not a destination."

- Dwight D. Eisenhower

Not often would you come across an organization that declares itself at its very inception, by so naming itself, to be **"In Harmony with Nature" (Inhana)**. For that you need to have an understanding, better still – **a realization, of the true frequencies of Nature** in its various manifestations. IORF, precisely, had that realization.

The inception of **Inhana Organic Research Foundation (IORF), Kolkata** was a culmination of this realization and due consideration of various thought processes of our Indian agricultural heritage – especially the wisdom of **Element-Energy-Activation (EEA) Principle** enshrined in our ancient Vedic texts.

Some of the basic points of consideration, before the commencement of our journey, were:

1. **Why did we shift to chemical-intensive agriculture since 1960s, negating our millennia old sustainable agricultural heritage?** The usual arguments put forward were:
   a. **Food security**
   b. **Net higher return for farmer, per unit area**
   c. **Modern & scientific way of agriculture**
   d. **Initial mesmerizing effects of artificial fertilizers**
   e. **There was no proper documentation of our traditional methodologies**

2. However, the underlying true unsustainable effects of chemical-intensive agriculture became apparent within two decades. **IORF realised that the occidental chemical-intensive agriculture is MOST unscientific, and hence unsustainable, by its inherent approach**.

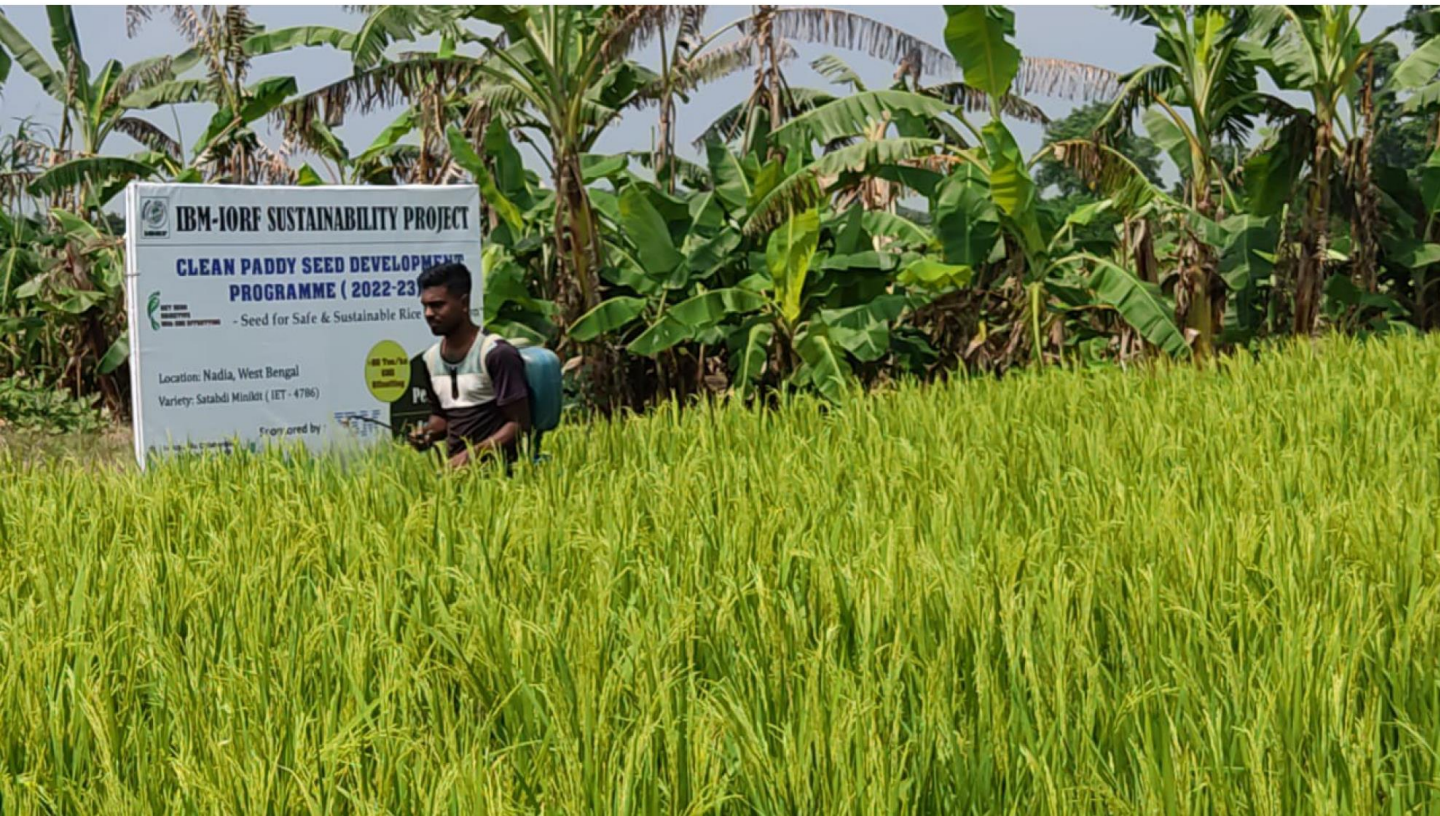
3. IORF defined agricultural sustainability through the most primary scale of measurement – **economic sustainability** (the other one, ecological sustainability, is difficult to measure) **of the farmers**.

4. IORF ensures the following, thereby **delivering economic & ecological sustainability** at the same time:

   a. **No hike in Cost of Production for farmers** – despite organic inputs being much costlier.

   b. **No crop loss** – despite no usage of synthetic pesticides.

   c. **It is Impossible to achieve either of the above in conventional organic agriculture** (ultimately manifested by the exorbitant consumer prices and sporadic supply of such produce in the local markets), let alone both of them simultaneously!



1. IORF realized that the true solution to these problems laid forgotten within the annals of our multi-millennia-old scientific treatise – the Vedas. This realization, coupled with a modern scientific approach towards innovation and documentation, propelled IORF to design its two pronged approach – of **Soil Health Management** and **Plant Health Management** – that can overcome the drawbacks of both chemical-intensive agriculture as well as conventional organic agriculture in the most efficient manner.

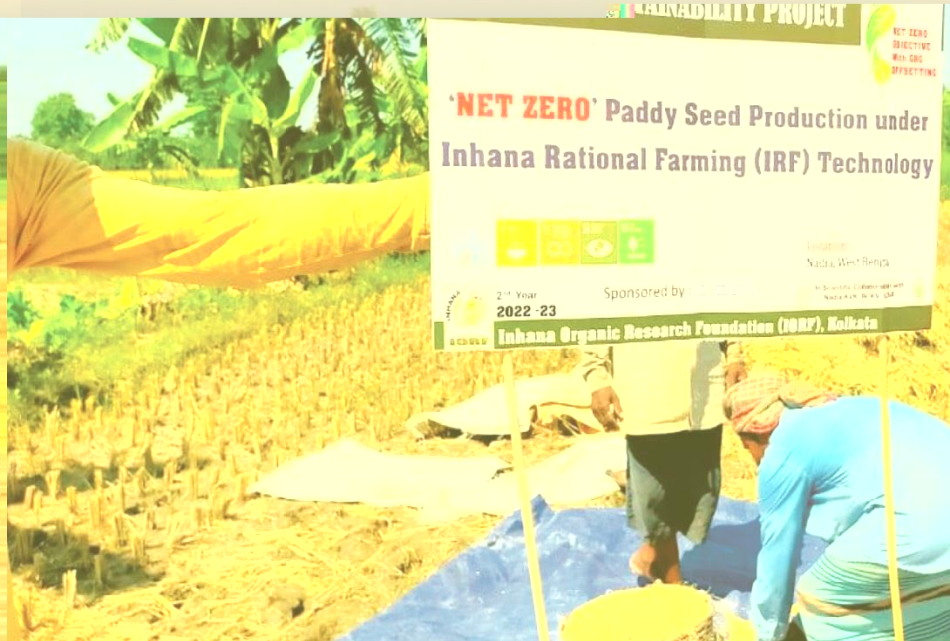
And it is this diligent approach that has resulted in the numerous accomplishments during the journey of two decades thus far. Accomplishments have been most unique, unparalleled and of ubiquitous application to say the least. Some of them are as follows:

1. IRF Technology was adjudged the **best "Organic Package of Practice"** under the **Food & Agriculture Organization (FAO) of the UN – Common Fund for Commodities (CFC) of FAO – Tea Board of India (TBI) Project** in all three categories i.e. Yield performance, Soil Development and Economics; in 2012.
2. **World's FIRST Carbon-Neutral Tea Estate**. This tea estate at West Jalinga in Assam, India was selected as a finalist in the World Tea Awards (2018) in the "Sustainable Tea Initiatives" category.

3. Research presentation at the **19th Organic World Congress 2018** on "**Climate Smart Agriculture**" using IRF Technology – the **only paper to be selected from India** in the Ecology segment.

4. **Organic paddy seed** (indigenous aromatic rice varieties of Bengal) and **Organic Vegetable Seed** development under IRF Technology in collaboration with **Visva Bharati University, Bidhan Chandra Krishi Viswavidyalaya and NABARD**; 2017-2020.

5. Research presentation at the **4th Organic Asia Congress 2021** by IFOAM; on **Development of Ecologically and Economically Sustainable Organic Seeds**.



More than **80 research publications** across national and international agri-science journals of repute, **on this singular topic of Inhana Rational Farming (IRF) Technology**, bear testament of both the journey and the accomplishments alike.

The journey began with Tea, deliberately, acknowledging that it is the **most difficult crop for organic conversion** due to its several limitations. Eventually over the next few years a 'Complete Organic Package of Practice' namely **Inhana Rational Farming (IRF) Technology** was developed, which emphasized that organic agriculture is the most Scientific Practice, and that only Ecological Sustainability can ensure Economic Sustainability. The initiative in Tea with only 60 Ha area (10% of total garden) in West Jalinga Tea Estate demonstrated highly positive results so that the entire 650 Ha plantation was put under IRF Technology in the very next year.

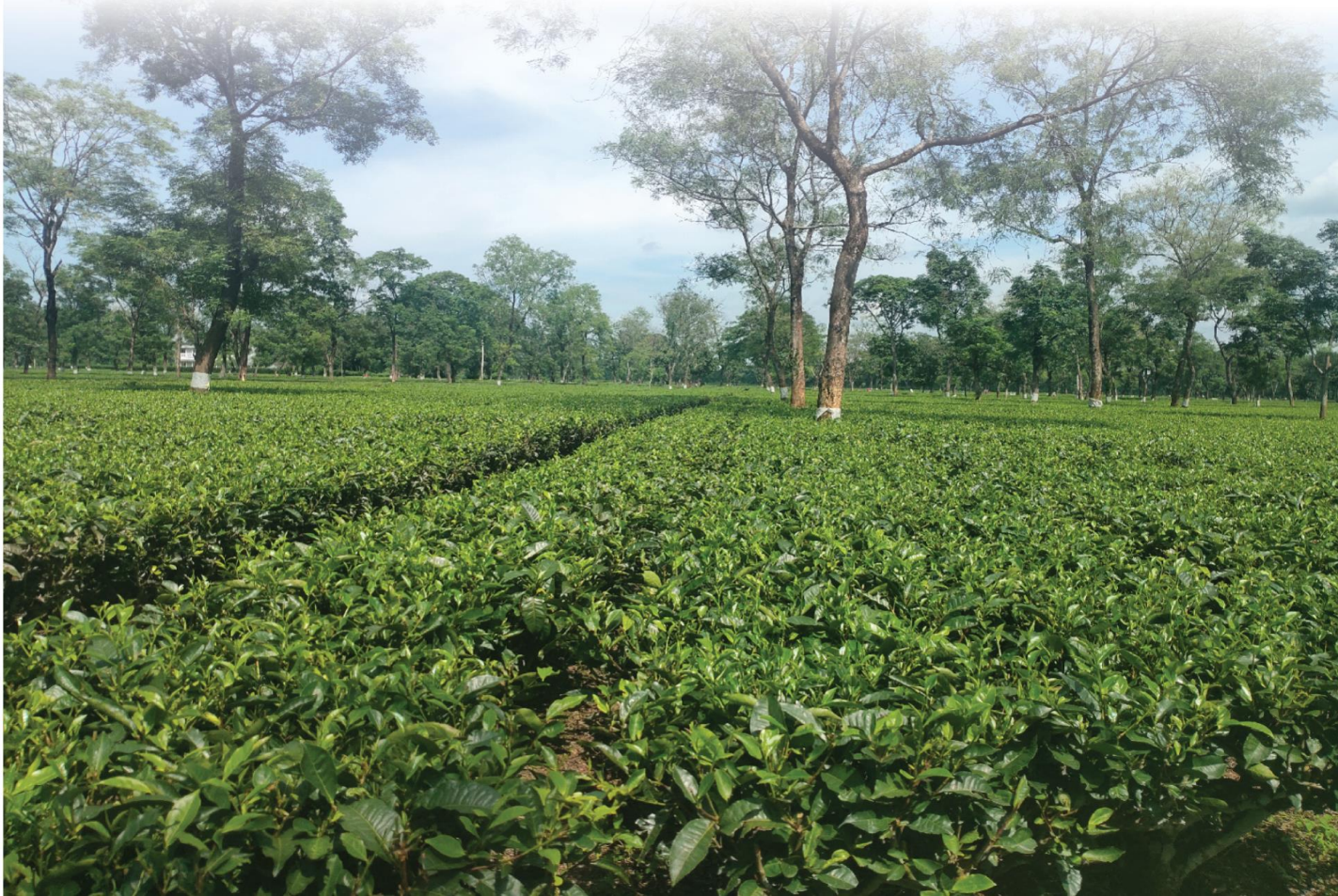
Today **West Jalinga is one of the largest organic tea garden in India**. It also happens to the **World's First and only Carbon Neutral Tea Estate** – a unique achievement under IRF Technology which is yet to be achieved by any other Organic Tea Estate.

In 2008, Inhana was engaged as the Scientific Partner by **Maud Tea Estate** (of the Chamong Group of Companies – presently the Largest Organic Tea Producer in India). The tea estate was selected to be the Model Organic Farm under FAO-CFC-TBI project (2008 – 2011); to carry out the research for '**Finding out an Effective Pathway for Sustainable Organic Tea Production**'. For the 1st time in the India organic scenario Inhana introduced the concept of Organic 'Packages of Practice' (POP).

Under detailed experimentation, all the available organic methods as well as the organic soil and plant inputs (which were used to develop the different POP's) were evaluated in terms of three criteria i.e. Crop Yield, Soil Development & Economics. IRF Technology was adjudged as the most effective organic method in terms of Crop Yield, Soil Development & Economics.

In the year 2014, **we started India's largest Sustainable Tea Management Programme** in the tea estates of **Goodricke Group Ltd.** towards the objective of Chemical Load Reduction and Sustainable Crop Yields. About **14 million kg 'Low Pesticide Footprint' Tea** have been produced so far, where up to **76% reduction in Chemical Load, up to 33% increase in Crop Productivity and about 10% increase in the Natural Antioxidant Potential of the Teas**; has been achieved.

As in tea, we have also extended our initiative of **pesticide load reduction in the field crops**; but here the commitment is not only reduction but complete pesticide elimination. In this effect, we have pioneered **100% Pesticide Residue Free Rice Production** in India (*which, incidentally, was duly certified by the Quality Council of India through its 'IndGAP' certification*), and a Large Scale Program of 'Clean Vegetable' *(complete elimination of chemical pesticides and nitrate fertilizers)* Production. The other initiatives include **Organic Paddy Seed and Organic Vegetable (including exotic vegetables) Seed Development Programs, which have been taken up in collaboration with Agricultural Universities, Krishi Vigyan Kendra (ICAR) and Gram Panchayats.**



Inhana has always maintained that to ensure sustainability in agriculture in a time bound manner, scientific evaluation of the cultivation practice and quantification of post adoption developments is very crucial. Hence, after thorough evaluation of extensive data pools we developed various Tools and Indices like **Soil Quality Index, Microbial Activity Potential (MAP), Compost Quality Index (CQI), Soil Development Index (SDI), Biodiversity Marker, Pesticide Pollution Index (PPI) with respect Soil (SPPI) and Crop (CPPI)** etc.

This enriching journey has now brought us to another unique destination – providing **true and tangible pathways for SDG 2 & 13** (as laid down by the United Nations) through sustainable agriculture. This destination, in turn, has enabled us to explore an uncharted path – not treaded by anyone thus far – **Net Zero offerings for our clients that amalgamate sustainability and GHG emission goals**. These offerings conform to the spirit and essence of Net Zero guidelines set by the Intergovernmental Panel on Climate Change (IPCC).

It would be interesting to note that the FAO has stated that, "***A paradigm shift is required to ensure sufficient supply of safe food at a global level while at the same time mitigating climate change and minimising other adverse environmental impacts***" while the UN has observed: "***It is currently not clear or well defined what constitutes productive and sustainable agricultural practices***". These apex bodies are desperately looking for pathways of sustainable agriculture.

IORF might just be the ONLY organization on this planet Earth that has the proven, validated and tangible pathways that the entire humankind is looking for!