TEA ACTION PROJECT

Empowering Tea Growing Communities

2022



Hello there!

A couple of weeks ago I began reading a book called ‘Everyday Ubuntu’. Written by the African Archbishop Desmond Tutu, Ubuntu is an ancient Southern African word that that literally means ‘I am because you are’. The book is a toolkit on learning to live better together because everything we do affects the whole world. Covid, for example, was an unprecedented threat. Yet, it brought with it an unprecedented opportunity for the world to unite and for the human species to recalibrate our roles in the world. We were forced to paused, course-correct and scale down. This brief respite from abandoning our ways made our planet thrive. It made us recognise that we thrive not because of the jobs we have, the clothes we wear or the cars we drive but rather because of the concerted efforts and fellowship of billions of species on our planet. Without the sun, there will be no trees, without the trees we will have no food or oxygen. We thrive because of our water systems that regenerate life, we thrive because of the bacteria, earthworms and insects that create ways for the earth to breathe and absorb, we thrive because the bees and butterflies help repopulate the forests. We thrive because so many species are what they are and do what they do.

We started this newsletter with the intention of sharing our collective stories and showing our ‘behind the scenes’ milestones and moments at Tea Promoters India. However, rather than presenting the best impressions of ourselves and what we have have achieved in the past year, the most important intention of this newsletter is for us to pause, reflect and celebrate all the beautiful yet imperfect, fractured yet perfect parts of the year gone by, for these are the parts that hold our greatest learnings and gifts.

The year 2021 opened on a scary and alarming note for us. The most transmissible and contagious variant of the COVID virus- the delta variant, surged through households, communities and workplaces like a storm in the month of May and June. This came at a point where after nearly 20 months into the pandemic we were all collectively experiencing pandemic fatigue. The Delta variant represented further loss of lives, re-impositions of lockdowns during our peak Second Flush season, reduction in mobility, stricter international border controls which meant delayed shipments for us, softening of company budgets resulting in order reductions and disrupted production. The impact this caused on the human and economic level was substantial and overwhelming.

The impact of Delta was felt at the personal level too as many of us experienced inexplicable grief at the loss of loved ones. Grief is a cruel education and a natural human response to loss. To grieve the loss of a loved one is a common human experience, and one that all of us will encounter throughout the course of our lifetimes. Although processes of grief and mourning can take many forms, rarely is the concept of grief extended to losses encountered in the natural world. I recently came across the term 'Ecological Grief', which is a form of grief that is associated with the physical disappearance, degradation or death of a species, wildlife, forests, ecosystems and landscapes due to Climate change and Environmental damage. This is particularly experienced by people and communities living and working in landscapes that are significantly affected by climate change and who have a deep cultural and emotional relationship with their land and natural environment.

This word got me thinking about the various pathways of ecological grief we see and experience. For example, In October 2021, torrential showers in Darjeeling, Kalimpong and Jalpaiguri districts of West Bengal triggered landslides causing damages to roads, home and bridges. As the downpour continued, 3,800 cubic feet of water flow per second was released from the Teesta Barrage, causing inundation in several parts of the low lying town areas further down the river. Several homes in these areas were submerged, electricity lines were cut off, paddy and agricultural crops were destroyed and livestock were killed. Many people including a large part of our tea workers and independent small tea farmers living in Samabeong, experienced significant grief as a result of losing their homes and neighbourhoods. It also leads me to wonder what climate related loses matter to the people living and working in our farms? What are their mental and emotional responses to the environmental changes that are brought upon them. How do they engage with the land now and how has that changed over the years?

It also brings to focus the enormous power and responsibility organisations such as ours have in conceptualising and addressing climate change loses. How do we work individually and collectively to enhance our understanding of Climate change impacts and build systems and mechanisms to compensate for the loses? How can we as leaders centre and truly align ourselves in these values? Most importantly how can we lead these conversations with vulnerability, curiosity and authenticity.

That's all for now!

Ashwini Sashidhar
Sustainability and Development
Tea Promoters India



Climate change threatens to fundamentally alter where and when natural resources are available to farmers and producers in the world. Tea is a rain fed crop and changes in rainfall and temperature directly affect tea production. As global temperatures inch upwards, all tea-producing belts across the world are being affected. Trees and forests are an essential condition for maintaining ecological balance and soil fertility.

Our challenge now is to develop diverse, self sustaining and more ecologically inspired approaches to tea production. This year we have focussed our Climate friendly initiatives in the following areas: the next few pages contains snap shots of the work we are doing in these areas.

1. Carbon Sequestration
2. Renewable Energy
3. Water Conservation
4. Environmental Friendly Packaging



Tree Based Tea Farming



A huge step we have taken to improve tea production and controlling our operational emissions is agroforestry, which has tremendous potential to transform and increase the productivity of a tea garden. Agroforestry is the practice of planting trees in farmlands alongside conventional crops. It helps re-establish the ecological balance in farm lands, prevents soil erosion and water run-off, provides alternate income options, and mitigates local weather extremes. We aim to create a multi-level mixture of ecosystems within our tea gardens, with productive trees, shade trees, nitrogen fixing plants between our tea crops and legumes at the ground-level, all existing in symbiosis.

This improves carbon sequestration, improves soil quality, promotes retention of nutrients, and also improves biodiversity. In addition we are also planting mixed forest trees along the steep slopes and edges of the garden. To check soil erosion and landslides we have been undertaking planting of Weeping Love grass, Guatemala grass, Priotropis and Artemesia to hold and bind the soil together. This has further helped rejuvenation of the water table, increased oxygen levels in the atmosphere, improved soil bacteria and has increased the presence of wild birds and animals. Another intervention which we have been practicing for years, in order to aid better top soil retention is to build physical barriers in the form of bamboo frames.





If there is magic on this planet
It is contained in water.
-Loren Eiseley



Climate change threatens to fundamentally alter where and when water is available to farmers and producers in the world. Our tea gardens have experienced record droughts over the past several years. Rise in temperatures have led to a shift in precipitation patterns, reducing snow and rainfall in hilly areas. This has resulted in mountain snow in the Himalayas melting earlier in the season, reducing the water levels in the natural rivers that have historically fed our tea gardens throughout the dry summer months.

Putharjhora located in the Dooars region of West Bengal is located along the foothills of the Eastern Himalayas with an assemblage of forest cover. Owing to its proximity to the hills, Putharjhora used to experience rainfall that was well distributed and temperatures that were seldom extreme. Over the past few years the tea garden has experienced an increasing trend of temperature with a significant change in the flood and drought frequency and intensity. These extreme weather events not only impact the wildlife ecosystem in the tea garden but also significantly impacts the livelihoods of the local community who are dependent on the forest and natural water systems for their survival. There is no doubt that climate change is a fact and is already taking place in our region.

Our proposal is to find innovative solutions to reinterpret traditional systems of water management. To begin this initiative we are building a series of natural water ponds in Putharjhora and Snowview tea gardens in order replenish the depleting water tables, create a rainwater storage system for the local residents and most importantly enable a micro-climatic condition within these gardens that can reduce the incidence of drought and dry conditions thereby ensuring a sustainable future for the livelihoods of the tea growing community that reside in these regions.

The first step in the way of rejuvenating our ground water tables is to capture the surface water through minimally invasion interventions. We have been building a catchment area or natural water fed pond using bunds. Bunds are small barriers that are built using soil, stones or other such materials to stop run-off water and contain it within a space. The water ponds will be built in various sections of the tea gardens and will collect water from rain and irrigation drains in the garden.





Switchin'

on

the

Sunshine!



Chardwar Tea Garden

Our approach to sustainability starts with our goal to run a responsible, conscious, efficient and ultimately profitable business. Honesty, integrity, safety, social responsibility and sustainability are fundamental to the way we work with all our business partners and the communities where we operate.

Energy is central to nearly every major challenge and opportunity the world faces today. Electricity or thermal energy from coal is required for tea production to operate tea machinery especially during processing activities such as withering, rolling and drying. The increase in the cost of non renewable fuels has led to an increase in the cost of tea production over the last few years. Moreover burning of fossil fuels also damage local ecosystems by releasing harmful pollutants and particulate matter into the environment such as sulphur oxides, nitrous oxide, and carbon dioxide. From a producers perspective, the presence of these contaminants in an organic farm environment can not only be ecologically damaging but also very disheartening.

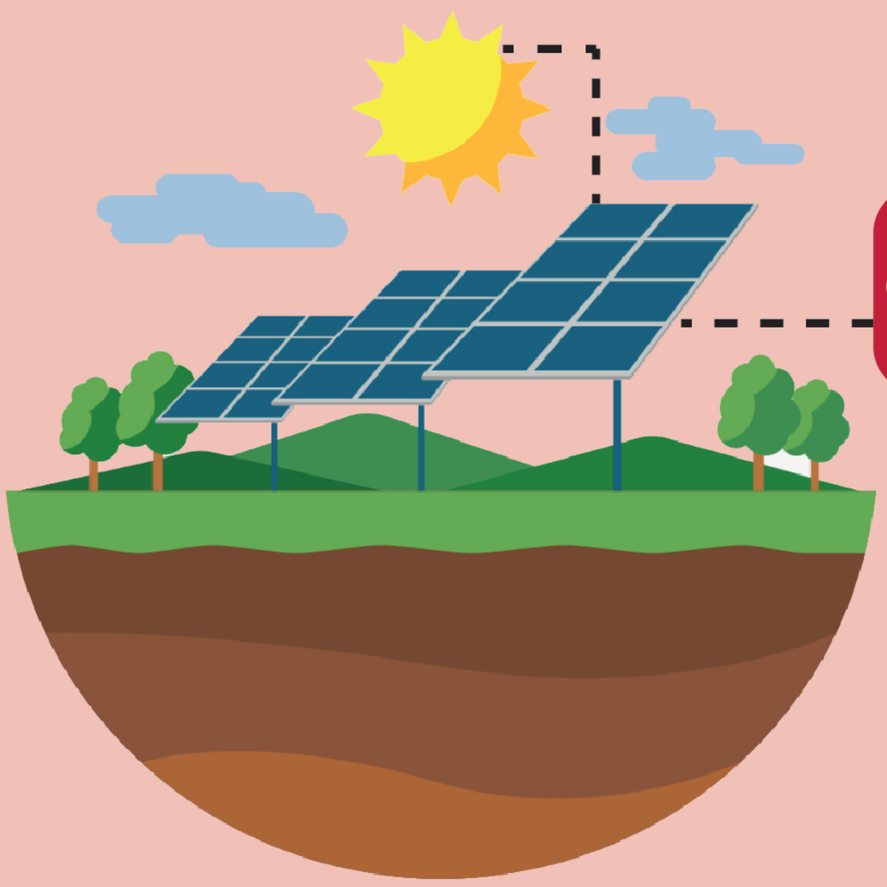
Most of our tea processing units are dependent on the electricity grid supplied by the local government to full-fill our electricity needs. Diesel generators are also used during times of power outages. In our efforts to shift to move sustainable energy sources, we conducted an energy audit in one of our tea gardens in Assam with the help of a specialised agency. Assam experiences bright sunny days through most part of the year and has one of the highest potential for solar energy with a capacity of 13,760 MW. Through the audit, we discovered that for approximately 1 kilogram of tea we produced, we consumed 3.5 kWh of thermal energy in the form of coal for drying and 0.5 kWh of electricity for sorting and packing the teas.

Solar power is the most infinite and abundantly available energy source in the world today. Solar energy is renewable, which makes it an environment friendly solution to our growing power needs without any harmful repercussions like the emission of greenhouse gases. In order to implement our vision to shift towards more renewable sources of energy for our production we have installed solar panels in our manufacturing unit in Chardwar tea garden in Assam. Chardwar is also one of the first organic tea gardens in Assam which is powered by Solar for its tea production.

The following chart shows the various tea manufacturing processes that consume high amounts of energy in our tea processing unit in:

Withering	Rolling	Drying	Sorting	Packing	Office
Coal + Electricity	Electricity	Electricity	Electricity	Electricity	Electricity

The following diagram lillustrates how the the solar photovoltaic solar panels convert solar radiation from the sun directly into DC electricity. The panels are connected to a controller which is used to draw out the power produced from the panels and send it to the battery followed by an inverter. The inverter is used to convert the DC electricity from the battery to AC electricity for powering the various tea machinery in our production unit.



Making the shift to solar energy has helped us align with the Sustainable Development goals of the United Nations to make sustainable energy more accessible and available. All the villages within our tea gardens now have solar lighting in their homes. Walkways and public spaces within the tea gardens also have solar lights installed. Solar energy is a promising alternative power source for us as it is easily available, scalable, reliable and sustainable. Our dream now is to convert all our manufacturing units in all our gardens to 100% renewable solar power. We are also aware that it will be challenging to install solar in the high altitude hilly regions of Darjeeling, but with advancement in technology and improvement in the quality of photovoltaic panels, we hope to achieve this dream in the next few years!

The Future of Packaging is Sustainable!

In response to the growing demand for sustainable product packaging, we have been finding new ways to be green in our tea packaging offerings without sacrificing function, quality, regulatory compliance, and package performance. Given the pervasive presence of packaging in all of our lives, the potential for packaging to have a negative impact on the world environment is enormous. For tea brands globally, just having an aesthetically pleasing package is no longer sufficient. Their customers expect accountability, environment traceability and transparency from them. Therefore, it becomes our collective responsibility as makers and users to ensure we design out current tea packaging products that are made from materials that are not sustainable, and have any potential negative impact on the environment.

Tea Bags: We now offer a more environment friendly alternative to the conventional tea bag. These tea bags are made from a renewable biopolymer, poly lactic acid (PLA) and are compostable and biodegradable!. PLA is a biopolymer derived completely from the sugars extracted from annually grown plants such as maize. PLA meets the food contact requirements for US FDA and EU regulation1935 (2004), and is compostable to EN13432.



Pot Bags: In our efforts to make the tea bag more environment friendly, we're taking action by removing packaging we don't need in the tea bag- like the string, tag and envelope. We have launched the pot bag in our packaging range because we believe that the simpler the product packaging, the more sustainable the solution. These pot bags are made from compostable PLA filter papers and are larger in size compared to the single and double chamber tea bags, as a result they can also hold larger leaf grade of tea. They are also compostable and biodegradable!



Plastic Pouches: Plastic or Biaxially oriented polypropylene (BOPP) pouches are commonly used for packing tea bags and loose leaf tea as they are durable and help preserve the freshness of the teas inside the boxes. While they offer convenience we needed to maintain all these benefits while also finding a way to make sure our packaging can be part of a circular economy. We have now launched a biodegradable alternative to these plastic films. Derived from wood pulp sourced from responsibly managed plantations, these environment friendly films are transparent and even meet the global standards for industrial composting and home composting.



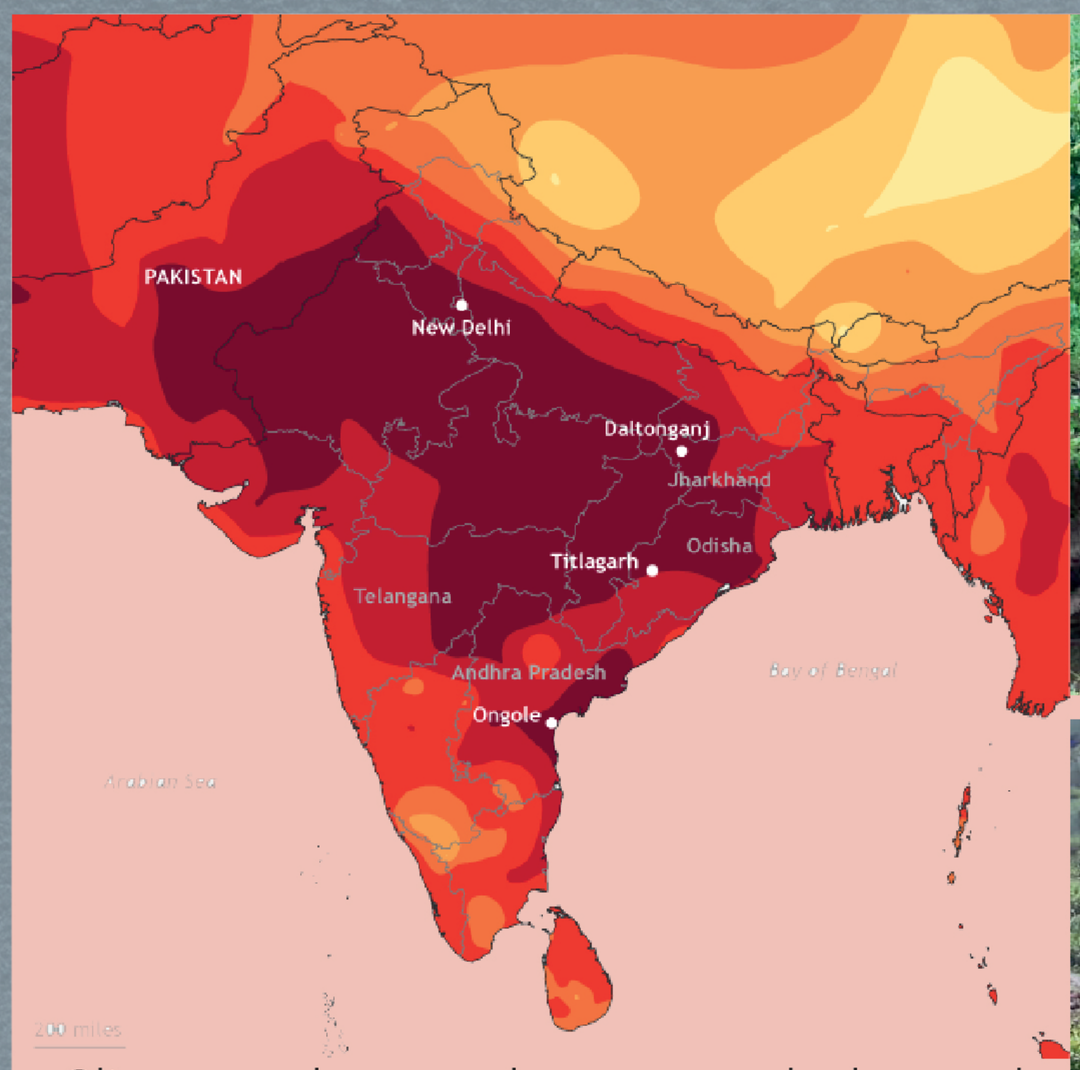
Plastic Shrink Wrap: Most tea brands use a thin outer plastic wrap around their product boxes to ensure that the teas remain airtight and retain their freshness as they move from our farms to their factories and supermarket shelves across continents. In order to be a part of this global transformational system change towards greener and cleaner packaging, we are rethinking our approach to packaging by reducing packaging we don't need and redesigning the packaging that we do need for circularity. Our solution to eliminating the plastic wrap around the box was to redesign the box itself and introduce a simple perforated tear-off seal. The seal ensures the teas inside remain airtight and fresh, thus eliminating the need for an outer plastic shrink wrap.



To successfully deliver this redesigned packaging portfolio we have had to navigate a complex landscape. We have had to study and understand how these different packaging materials work will within recycling and composting systems in different geographies. All of this takes significant time and investment, as well as a thoughtful, multi-stakeholder approach with innovators and partners. We have a long way way to go but we know we are heading in the right direction.



Mourning Nature







Climate change has moved beyond melting glaciers. India is currently facing a prolonged heatwave, with temperatures exceeding 42°C in numerous cities across the country. The satellite image above shows the land surface temperature across most of the nation last week. In 202, an untimely torrential downpour caused severe landslides in several parts of our gardens causing immense damage to life, tea and the land.

In the UN Climate Change Conference in Glasgow in November 2021, India committed to ensure new carbon zero emissions by 2070. To facilitate this shift the government has incentivised sustainable energy sources such as solar and hydro power. However, it is just not the responsibility of the government but also companies, businesses and industries to adopt sustainable practices and rise to meet this challenge. We asked two eminent members of our organisation to tell us about how they have experienced climate change in the tea gardens and what is the biggest climate grief they are going through.

“The tea plant hitherto termed as a ” self adaptive one ” is under threat. In Assam, the intense use of pesticides and chemical fertilizers in many tea farms has also contributed to soil degradation in the region. During all my years of working in the tea gardens of Assam, I have personally seen and experienced how climate changes are severely impacting farms and plantations both in terms of quality and quantity. The rise in the ambient temperature is a growing cause of concern and it would be prudent to plant saplings on a war footing.”

Mr. Pavan Kumar Kaul

“I have been living in Darjeeling for many years now and during all these years, I have never before witnessed erratic weather patterns in the hills. Growing up, we always had clearly defined seasons through the year- Spring, Summer, Monsoons and Winter. However, over the last few years, our winters in Darjeeling have become warmer, some flowers and trees don’t blossom in spring, we experience untimely or delayed monsoons and hail storms too have also become more frequent through the year. It is disheartening to see our land changing and bearing the consequences of climate change.”

Ms.Bhawana Rai

Biodynamic farming and the relevance of Rudolf Steiner in tea farming.



Interdependence at its best

Rudolf Steiner's gift to the world was anthroposophy or spiritual Science. He aimed to guide the spiritual in the human being to the spiritual in the universe. Steiner presented a different way of looking at cultivation and the Earth in general, showing the inter-relationship and connections between all living things. He viewed the earth, our planet as a dynamic, integrated, living organism that glides around in the seemingly endless cosmos. He believed that our physical/material world which is an assortment of simplicities complexities, is permeated on all sides by a rich and mutual faceted spiritual world that is full of mysteries, resources, discoveries, secrets, surprises, beauty, form and character. The Physical and the spiritual meld into a nourishing gel that enables LIFE, which unfolds in a space we call our WORLD.

Our biodynamic tea cultivation practices at Tea Promoters India finds its roots in this very philosophy. Compared with organic or natural farming, the biodynamic concept of organic farming is not only a program of alternative agricultural techniques such as pest management but it is fundamentally a new concept of agriculture. Steiner emphasised that a healthy, well-structured soil, rich in humus and high in biological activity is fundamental for a sustainable, well balanced agricultural system. He insisted on avoiding chemicals, and concentrating instead on natural composts inoculated with the help of biodynamic preparations.

Our tea cultivation is based on anthroposophy, where we combine scientifically based knowledge with spiritual knowledge and notions. Although we use BD preps in all our TPI tea gardens, Selimbong Tea Garden and Putharjhora Tea Garden are presently Demeter certified.

WHAT IS A BIODYNAMIC FARM? HOW IS IT DIFFERENT FROM AN ORGANIC FARM?

Biodynamic & Organic farming both look at the soil as a living organism. A certified biodynamic product is also a certified organic product. Both organic & biodynamic farming prohibit the use of synthetic fertilisers and pesticides, plant growth regulators, and livestock feed additives. Both farming methods also use organic agricultural practices such as crop rotation and composting, tree planting & the integrated use of livestock.

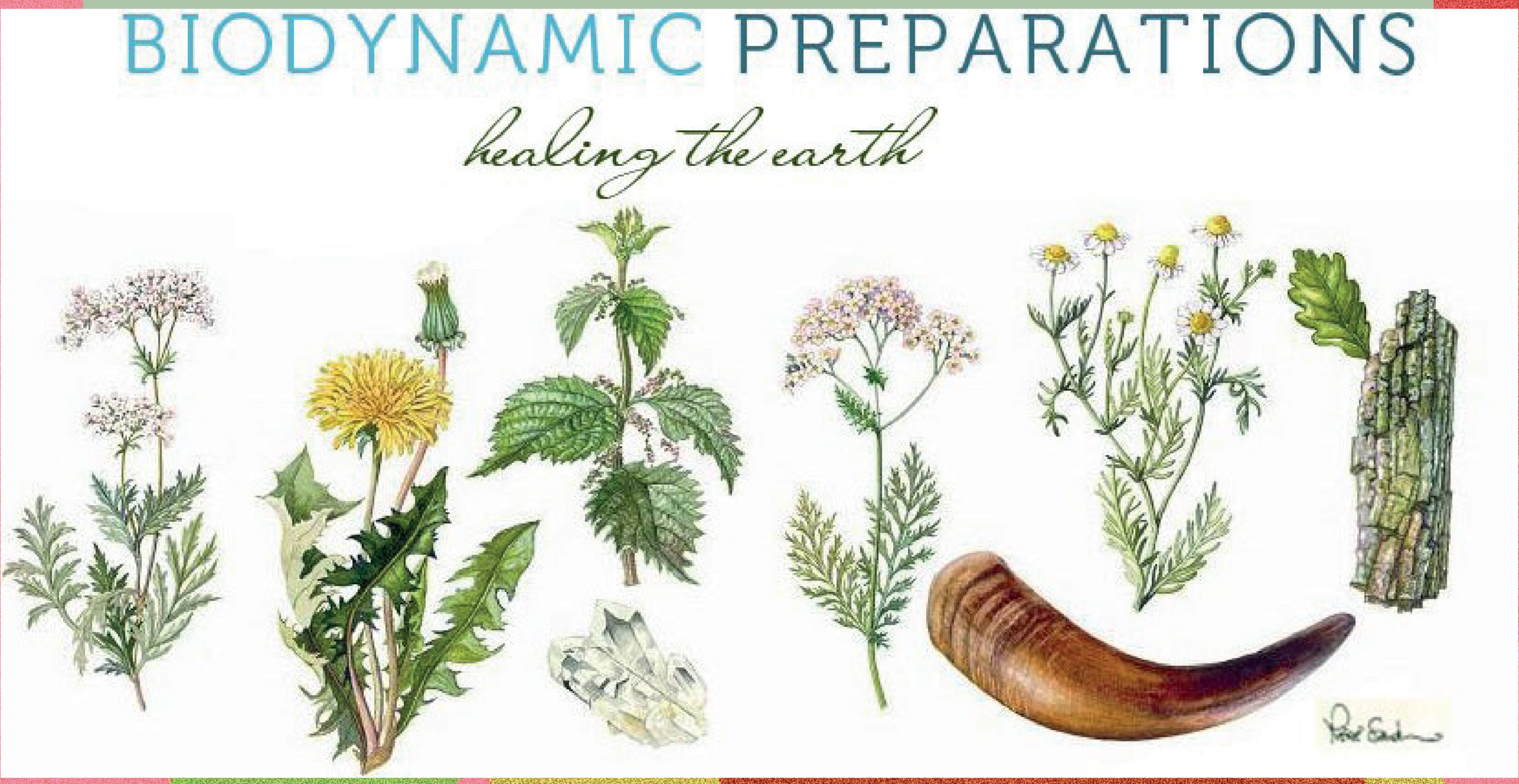
However, in addition to these practices, biodynamic agriculture uses special plant, animal and mineral preparations along with the rhythmic influences of the sun, moon, planets and stars to create a thriving ecosystem.

THE ELEMENTS AND THE INFLUENCE OF PLANETS:

According to the Anthroposophic vision, plants have a physical body and a spiritual/etheric body containing life. These follow rhythmic sequences that define development, structure, and degradation of the tea bushes. The different phases of the Moon for example also affect the growth of the tea bushes. During an ascending moon the plant sap rises and the upper part of the plant is filled with the most vitality. When the moon is descending, more vitality goes into the roots of the plants making it a good time to stimulate root activity such as adding compost.

UNDERSTANDING BIODYNAMIC PREPARATIONS:

The biodynamic preparations are simple, natural, homeopathic preparations are used to the breaking-down process and potential life forces in the soil. They are made of certain medicinal herbs that have undergone a long process of fermentation in order to enrich them in growth-stimulating substances. They are numbered 500-508. These preparations are not fertilisers themselves but greatly assist in the fertilising process. Once prepared they are are applied as liquid sprays in very small amounts and help bring healing, vitality and sensitivity to the tea farms.



We grow our tea with the help of the moon, planets, plants and animals.

A woman is a full circle. Within her is the power to create, nurture and transform.

Celebrating the many women at TPI



Laughter Therapy!

With a smile so contagious, Binu Tamang has won the hearts of many of her co-workers and colleagues. She constantly regales them with stories of her adventures, her family and childhood and in the process makes tea plucking such an enjoyable process for herself and her friends.

She has worked with our organisation for 18 years and is a doting mother to two wonderful children, who have grown up in the tea garden.



Superwoman!

Strong, Fearless, Warm, Loving, Patient and Selfless are some of the words used to describe Roshni Pradhan. she has worked in our organisation for 18 years and is mother to two wonderful and loving boys.

She believes that successful women are ones that never gave up despite their struggles. She has overcome many personal difficulties to educate her two boys and dreams of seeing them happy and successful in their professions.



Together we achieve more!

Having worked in Chardwar for 19 years, Marium Baraik, is the living example that there is no force more powerful than a woman determined to rise. She has seen the garden change many leadership hands and through its most challenging and difficult years when it was abandoned and neglected. We thought it was only apt that we honour her commitment and service by making her inaugurate our most special project in the garden this year- The Solar project.



Keeping Menstrual Hygiene right, to make our future bright!

Women's healthcare and Wellness continues to be at the centre of our work. Our partnership with Unipads, an organisation that provides healthy menstruation solutions to underprivileged women has only grown in strength and numbers. This year we have distributed packets 4157 packets of reusable cloth sanitary napkins to all our women workers. Men are also key stakeholders in women and maternal health and during these intervention programs we try and make them a part of the conversations as well.









We had been using old rags and cloth for many years before Unipads came in and gave us their washable and reusable sanitary napkins. I have been using them for 3 years now and find it comfortable, hygenic and easy to wash and re-use.

Thank you Unipads for giving us this blessing every month!



Roshni Pradhan
Samabeong Tea Garden

Big-city medicine. Hometown care.

As India welcomed 2021, the country was reporting close to 130,000 covid cases everyday. The steep rise in cases made headlines across the world. A month later, the pandemic started spreading fast and furiously through rural India. Putharjhora, our tea garden in the Dooars region of west bengal was one of the worst hit. Many of our workers and their families were infected and this placed an unprecedented demand on our health care system in the tea garden. Our primary health care centre/dispensary was over flowing with patients. We didn't have the required infrastructure to meet the demand for oxygen cylinders, patient beds, toilets, medical supplies, medicines, doctors and nursing staff.

We were facing a humanitarian crisis and it was then that we realised that we needed to have an effective strategy in place to not only control the spread of the virus but we also needed to reboot our healthcare system in the tea garden. With the help of a generous donation from two of our leading partners we were able to build a new dispensary with more beds, toilets, an larger out-patient room, refrigerators to store covid vaccinations and an ungraded dispensary fully equipped with medicines.

Below are pictures of the new dispensary at Putharjhora Tea Garden.







Bluring the lines between work and play...

Creating a sustainable future for business and growth requires the cultivation of meaningful relationships with all our members and stakeholders. In March 2022, we organised our Annual Conference for our tea gardens team at the Salesian College in Siliguri to evaluate our performance in season 2021, and discuss the way forward for our season 2022. Of course, we ended the evening with some food, music and dance!











Tea Action Project is a Non Profit organisation founded in 1995 by Tea Promoters India. Our objective is to work closely with tea farmers and workers in India to make tea trade a vehicle for positive social and environmental transformation.

We endeavour to inspire conscious tea consumers to support our efforts to grow tea responsibly and develop the tea communities on our farms. We undertake projects in the areas of health, education, sanitation, wildlife conservation, climate change and sustainability.

For more information: www.teaactionproject.org
Write to us at: ashwini@teapromoters.in