THE DATAI CONSERVING NATURE'S BEAUTY Where nature thrives, we are revived.

THE DATAI



Foreword

Ever since we opened our doors to guests over 25 years ago, The Datai Langkawi has always held at its core a profound respect for nature and culture.

It is our ethos, informing everything we do.

Sustainability and conservation initiatives were seamlessly interwoven into the fabric of our offering.

When we embarked upon our most extensive refurbishment in 2017, we took the opportunity to grow and progress our sustainability initiatives into a long-term programme that would sustain the island's unique biodiversity and beauty, and provide more opportunities for engagement with the community.

The Datai Pledge is the result of that ambition and meticulous planning.

The Datai Pledge programme has been developed by our dedicated team of naturalists, marine biologists and sustainability team in partnership with local NGOs and social enterprises selected for their shared vision and relevant expertise. The programme comprises a number of groundbreaking initiatives, setting precedents in their specific area, and also includes a participatory element for guests. More information will be revealed in time, once we have tested and refined the fine details of the programme.

We are believers in making a difference within our capacity and are confident that our initiative as pioneers will make a significant difference to the welfare of the wildlife and community within Datai Bay and Langkawi island.

> ARNAUD GIRODON GENERAL MANAGER THE DATAI LANGKAWI



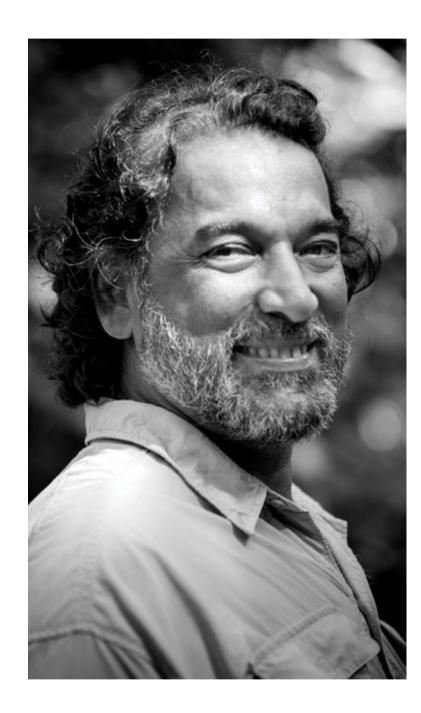


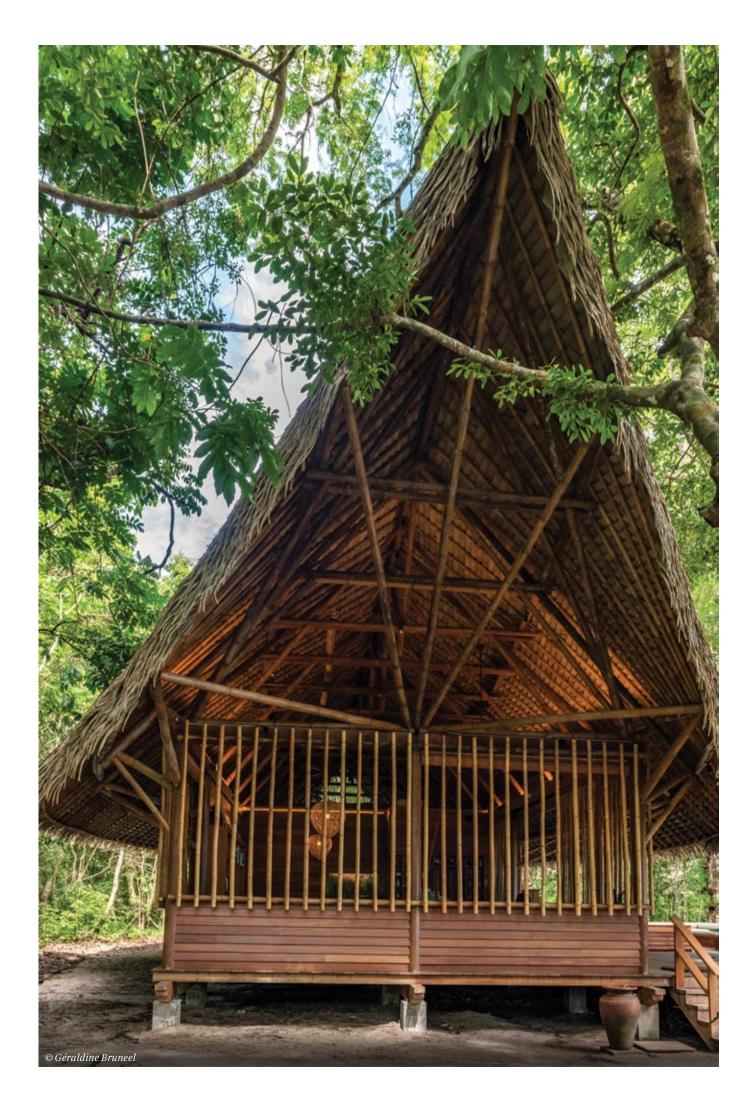
Our Chief Advisor

The Datai Pledge is led by Irshad Mobarak, the resort's resident naturalist. Irshad is one of Malaysia's most celebrated naturalists with over 23 years of experience in the field, all of which have been spent with The Datai. Inspired by the lives of pioneer explorers such as the legendary Alfred Russel Wallace and the renowned botanist, Professor David Bellamy, Irshad left a career in banking for a calling in natural history. A self-taught naturalist and an outdoor buff, Irshad originally conducted interpretative walks for The Datai.

Throughout his career, Irshad has appeared in and contributed to many nature documentaries for Discovery Channel, National Geographic and the BBC. He has also presented an inspirational TED Talk in the *Ideas Worth Spreading* segment. Irshad has also authored a nature guide that provides an insight into Langkawi's rich natural history as well as hosted a mini documentary series, both titled, *Discovering Langkawi with Irshad Mobarak*.

Irshad is based in Langkawi where he owns a successful nature excursions company and is a strong advocate for the conservation of Langkawi's fragile natural ecosystems. He regularly visits local schools and provides talks, doing his best to instil a love and respect for nature.





Mission Statement



The Datai Pledge is a groundbreaking and ambitious programme of conservation and sustainability initiatives designed to preserve and strengthen the environment, ecosystems, culture, heritage and local community in order to ensure its uniqueness for future generations of visitors and Malaysians to cherish.

Our aim is to create a mutualistic relationship between our business and our environment – the ocean, the land and the people – and to integrate sustainability into all aspects of our operations, promoting future growth.

We have engaged with specialists, NGOs and social enterprises, tapping into their specialised expertise to work in partnership with our own team to develop the most comprehensive programme to achieve our objectives.

### Funding for The Datai Pledge

The Datai Pledge programme, with activities developed in conjunction with our NGO partners, has been devised to benefit the welfare of the fauna, flora, natural ecosystems and communities within Langkawi.

Funding is required to plan, implement, monitor, evaluate and continuously optimise and further develop the programme. Considerable investment has already been made to set up the initiatives through the following creation of an in-house bottling plant and production of custom-made recyclable glass bottles; construction of the Coral Nursery; construction of the Recycling Storage Centre, Pure Centre and Pure Lab; creation and cultivation of The Garden, construction of the Wetland Filtration System, the Worm and Hot Composting Farms; machinery to crush glass, plastic and chip wood; the incinerator to burn non-recyclable items; the food compactor to macerate food waste; and finally, the practice of upcycling non-recyclable in-room items. Funding was also required to create activities with our NGO and social enterprise partners, as well as new guest activities related to sustainability learning and experience.

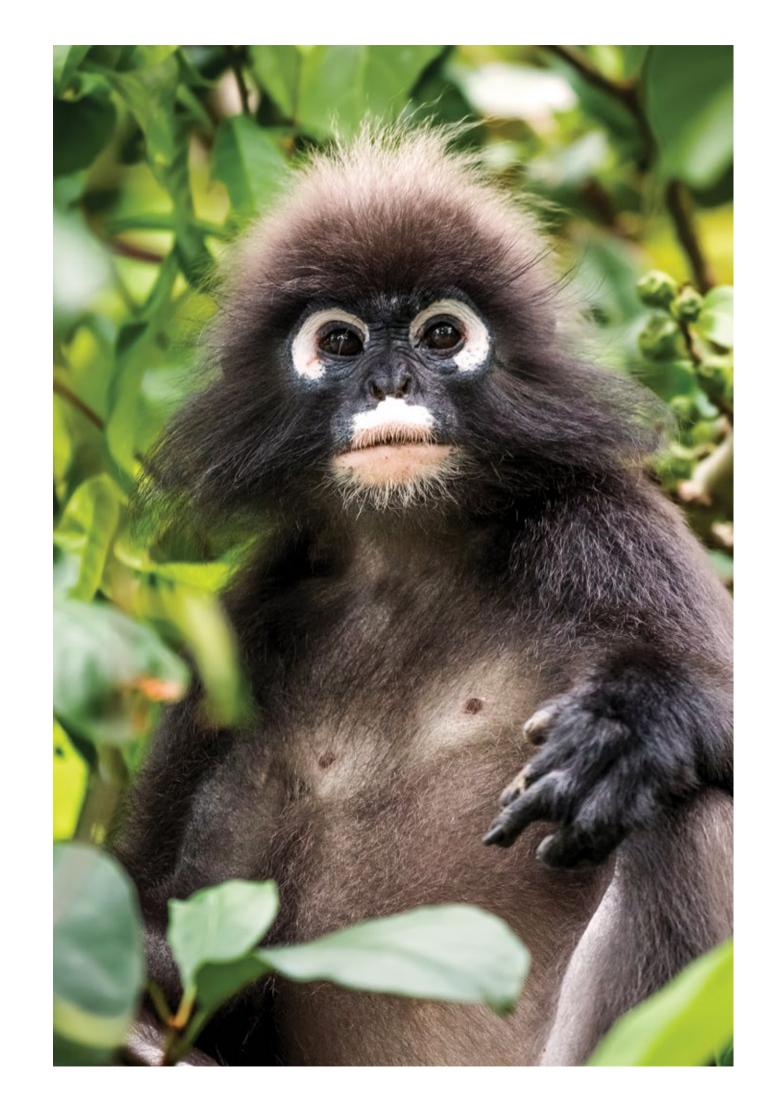
The chief contributor to the funding of The Datai Pledge is The Datai Langkawi. It is anticipated that other contributions will come from guest donations, private donors and corporates.

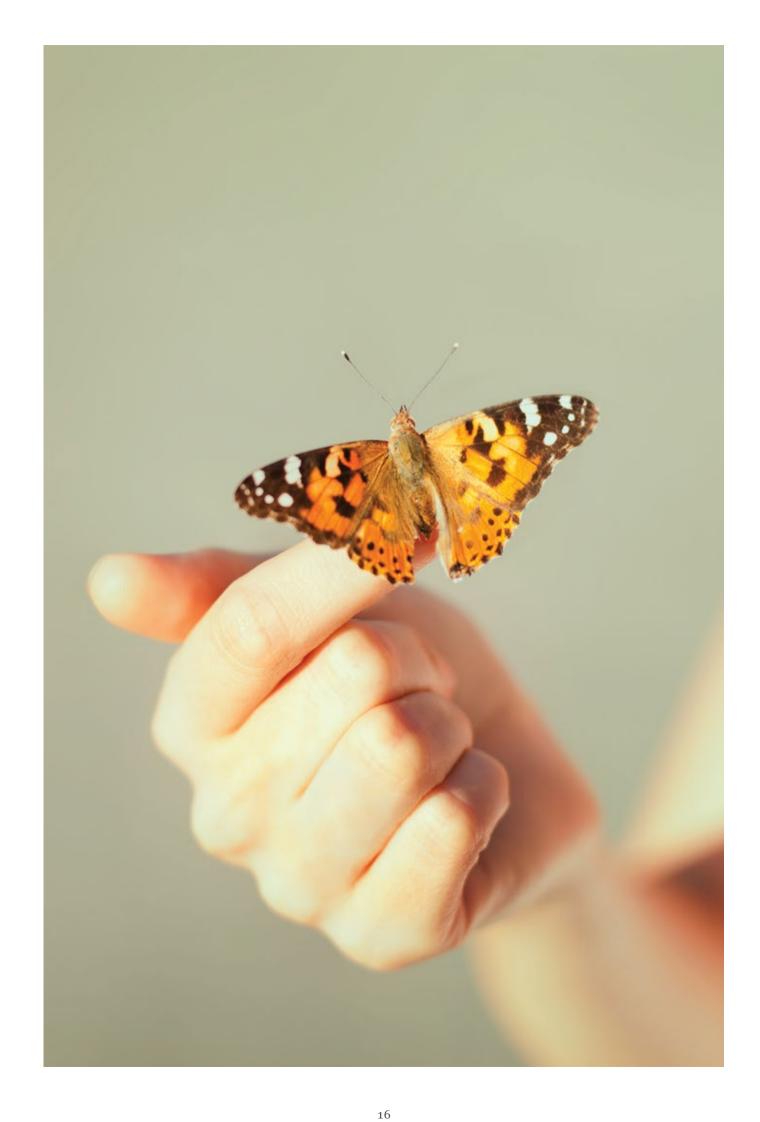
Other sources of funding will also be received from:
Educational activities for guests such as the Little Gardener
around The Garden, Coral of Opportunity organised
at The Nature Centre and a Day Out With Dolphin Researchers.

**Nature adoption** of a tree, coral, dolphin or wildlife corridor through a one-off or monthly contribution.

Sale of merchandise including upcycled products such as jewellery, soaps, candles, glass figurines and wooden crafts made by local artisans, and natural products like our stingless bee honey from The Garden.

A small optional supplementary contribution of MYR 20 per room per night will be added to guests' invoices. The nett contribution of The Datai Pledge, excluding operating expenses for this programme, will be divided equally amongst our NGO and social enterprise partners to fund their research, conservation and sustainability efforts.





# The four pillars of The Datai Pledge



### PURE FOR THE FUTURE

To act responsibly and place sustainability at the heart of The Datai Langkawi's business operations.



### FISH FOR THE FUTURE

To protect marine life within Datai Bay through the rehabilitation of coral reefs and promotion of sustainable fishing.



### WILDLIFE FOR THE FUTURE

To protect, restore and reconnect Langkawi's fragmented forests to ensure wildlife continues to thrive.



### YOUTH FOR THE FUTURE

To promote education programmes on sustainability and nature protection awareness aimed at local youth.



The greatest change we need to make is from consumption to production, even if on a small scale, in our own gardens. If only 10% of us do this, there is enough for everyone. Hence the futility of revolutionaries who have no gardens, who depend on the very system they attack, and who produce words and bullets, not food and shelter."

BILL MOLLISON,
FOUNDER OF THE PERMACULTURE MOVEMENT



FOR THE FUTURE

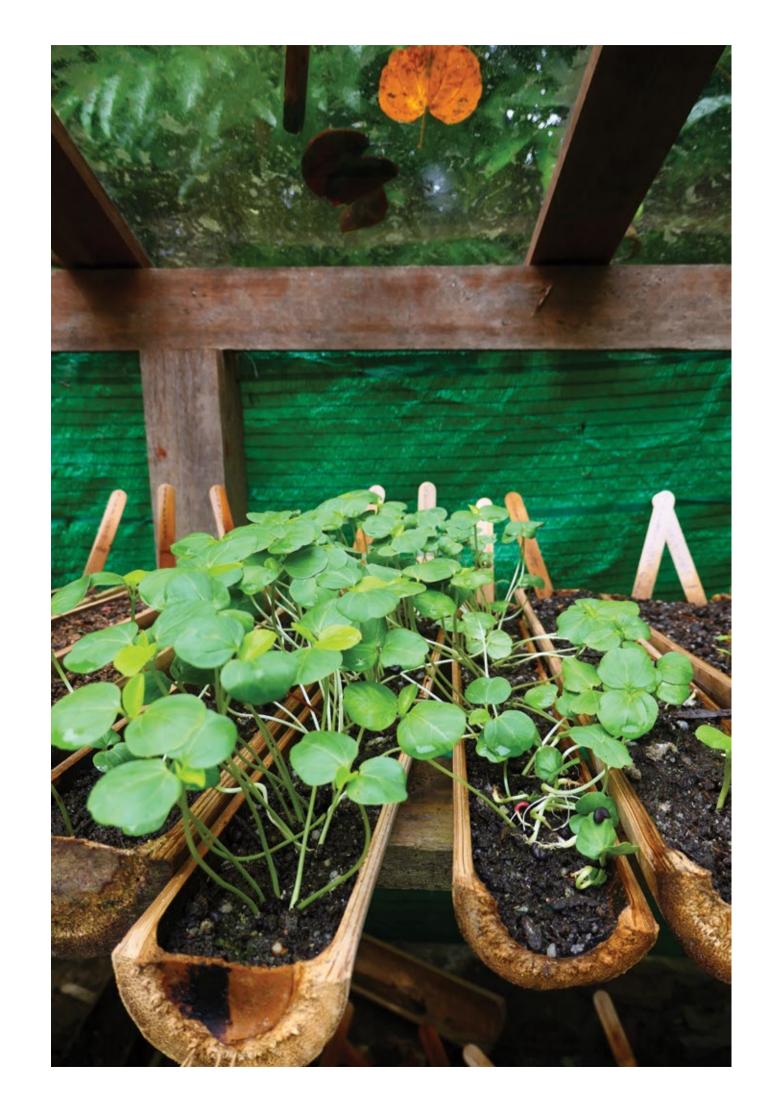
### Pure for the Future

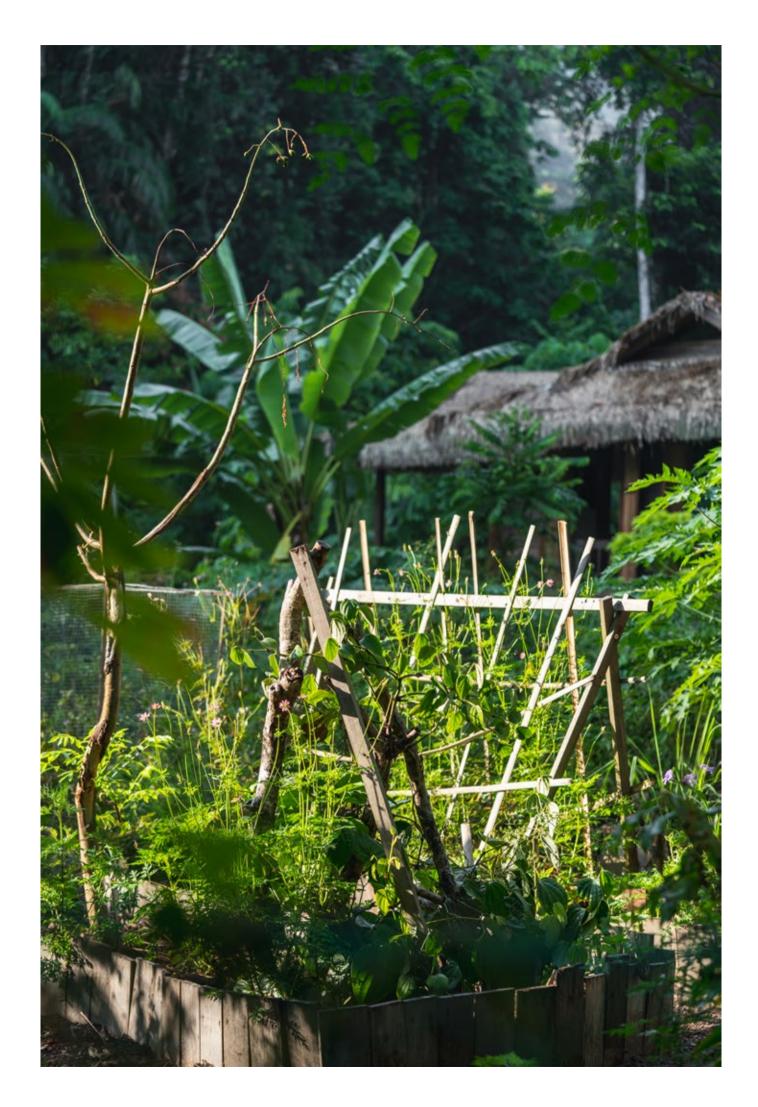


Pure for the Future underpins our commitment to be a sustainable business through reducing the use of natural resources, reducing our carbon footprint and achieving zero waste to the landfill.

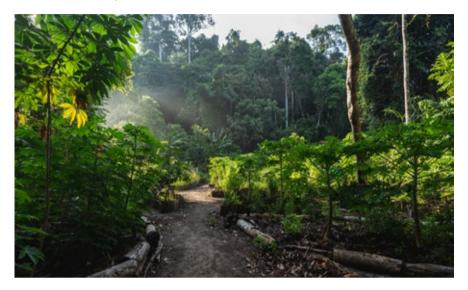
It is based on the tenets of a circular economy, which is a move away from the current linear model of take-make-waste through the principles of designing out waste and pollution, keeping products and materials in use, and regenerating natural systems. Our sustainability initiatives were the result of a rigorous assessment of the impact of our operations on the environment and are focused on reducing waste which would either end up in a landfill or the sea (thus ending up as pollution) by making it recyclable, upcyclable or returning it back into nature in an organic form. We are also in the process of finalising a programme of activities with Sahabat Alam Langkawi (SALAM Langkawi), a Malaysian non-profit group dedicated to environmental conservation.

As part of our commitment to sustainability, we have undertaken an extensive audit and just received certification for the EarthCheck ECO (Terrestrial) Certification programme. EarthCheck is the world's leading environmental certification and benchmarking programme for the travel and tourism industry, which audits operational efficiencies, guest experience and environmental footprint.





# Pure for the Future Programmes already launched at the resort



### ZERO WASTE TO THE LANDFILL PROGRAMME

All trash is separated into organic (wet) and non-organic (dry) waste at the Pure Centre for recycling and upcycling.

### Organic Waste

- Organic waste is macerated through a compactor, removing a large quantity of its water content and sent to The Garden to be regenerated back into soil. The food waste is taken to the Organic Wealth Centre, where it is either decomposed into biofertilisers by worm farms or hot composted by microorganisms using chipped wood from landscape waste and turned into compost for The Gardens' organic produce.
- The Garden has been created using the permaculture philosophy of a self-sustaining, organic food production system based on man working in harmony with nature, where nothing is exploited or wasted.
   In The Garden, compacted food waste is transformed back into compost which is used to cultivate a diverse medley of fruits, vegetables, herbs and spices – some of which are used as ingredients in the kitchens of The Datai's restaurants.

### Non-Organic Waste

- Glass is crushed and reused in a workable form for in-house construction projects as well as decorative items at the Pure Lab.
- Paper is shredded and recycled to be made into compost at The Garden. Plastic is shredded and recycled to create concrete slabs and vases for the construction of new premises for the Pure Lab.
- Non-toxic and non-recyclable waste is incinerated to produce ash for construction within The Garden.
- Other materials like plastic, paper, cooking oil, aluminium, candles and fabrics are given to local recycling agents or donated to local NGOs.

# Pure for the Future Programmes already launched at the resort



#### NO SINGLE-USE PLASTIC POLICY

In order to completely avoid the use of single-use plastic bottles, we created our in-house water bottling plant. Water is purified using reverse osmosis and bottled in customised glass bottles which are recycled.

We avoid the use of plastic straws by introducing bamboo and stainless steel straws. We have engaged a local tribe from East Malaysia to produce these bamboo straws and create reusable baskets from upcycled plastic. Plastic toiletries have been replaced with sustainable bamboo toiletries.

Items are used and reused for maximum usage. E.g. garbage bags are washed and reused.

Our policy of avoiding single-use plastic extends to our suppliers and contractors, from delivery to packaging – to completely avoid or limit plastic packaging, or to accept used products for recycling.



#### ENERGY SAVING PROGRAMME

HVAC, a complete system of heating, ventilation and air-conditioning has been installed and is fully monitored by our BMS (Building Management System) to ensure continuous energy-saving practices.

Recently installed FAHUs (Fresh Air Handling Units) regulate the air flow inside guest rooms by circulating fresh air inside the room to keep it cool and prevent condensation when the Master Switch is turned off, thus avoiding unnecessary usage of energy to cool the room.

The air conditioner temperature is set at 24C for optimal comfort and efficient energy consumption. More energy is consumed as the temperature is lowered.

All fitted lights are LED which are up to 80% more efficient than traditional lighting through their consumption of less power, which in turn results in reducing greenhouse and CO2 emissions. The LED lights fitted are also free of toxic materials like mercury.

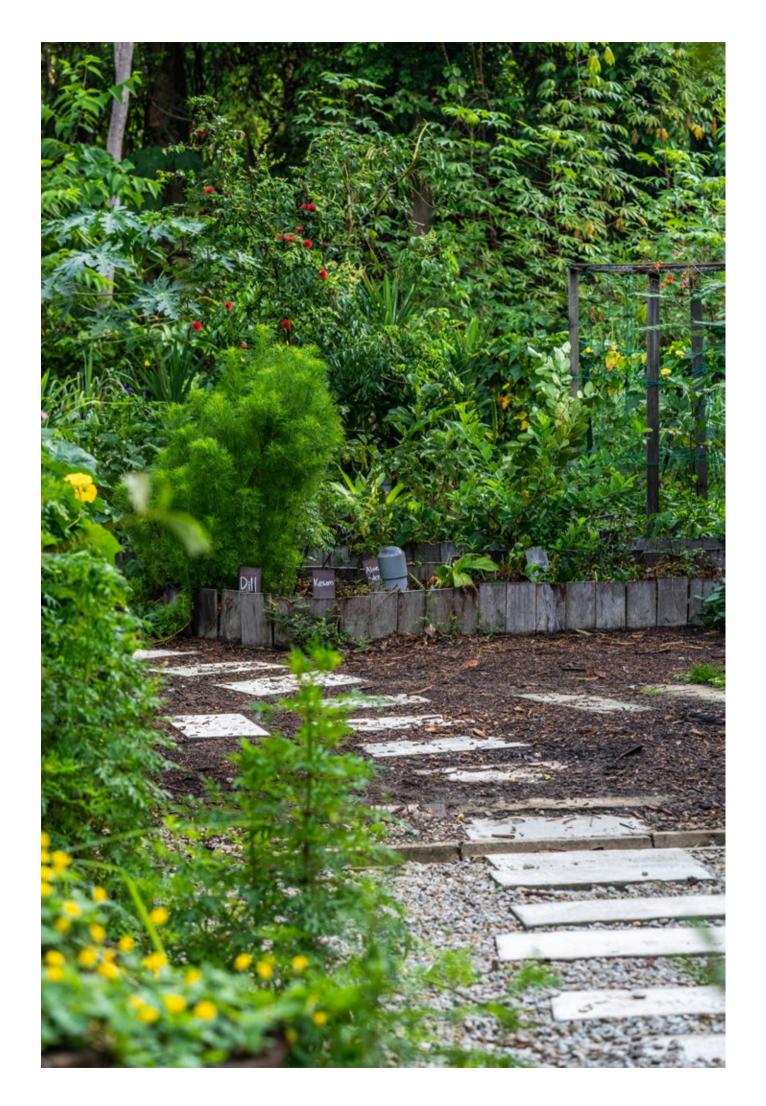
An operational Monthly Energy Saving programme has been put in place.



### WATER MANAGEMENT PROGRAMME

Waste water from the sewage treatment plant is further purified using aquatic plants at the Wetland Filtration System, which is an organic waste water management system. The clean water is then used for irrigation at The Garden, while excess water is released back into nature.

Rainwater is also harvested to irrigate The Garden.



### Certifications



### **Green Hotel Certification 2019 (received Jul 2019)**

Awarded by the Ministry of Tourism, Arts and Culture Malaysia in recognition of sustainability efforts in hospitality.

### EarthCheck Silver Certification 2019 (received Nov 2019)

The Datai Langkawi is the first organisation in the world to be awarded the EarthCheck ECO Certification for terrestrial (land-based) tourism projects. EarthCheck science and products were developed by the Australian government's Sustainable Tourism Co-operative Research Centre (STCRC) and built on the Agenda 21 principles for Sustainable Development endorsed at the United Nations Earth Summit in 1992.

Pure for the Future Partner



Sahabat Alam Langkawi (SALAM Langkawi) is a Malaysian non-profit corporation dedicated to environmental conservation.

Established in 2009, they have a track record of creating awareness of environmental and conservation issues and engaging volunteers to participate in environmental actions to help clean, protect and preserve our natural resources.

Their principal objective is to spearhead the development of sustainable tourism programmes in Langkawi which will benefit locals, industry players and tourists through effective strategic governance as well as workable initiatives.

SALAM Langkawi's strength is their strong network with the local community and their ability to galvanise volunteer action. One of their key projects includes a fabric recycling initiative to help keep fabrics out of landfills and give them new life and purpose.

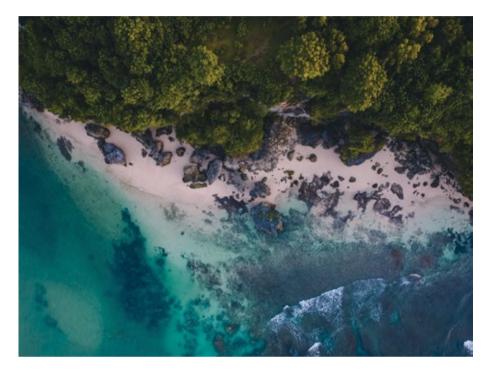


"The happiness of the bee and the dolphin is to exist. For man it is to know that and to wonder at it."

JACQUES COUSTEAU

FOR THE FUTURE

### Fish for the Future

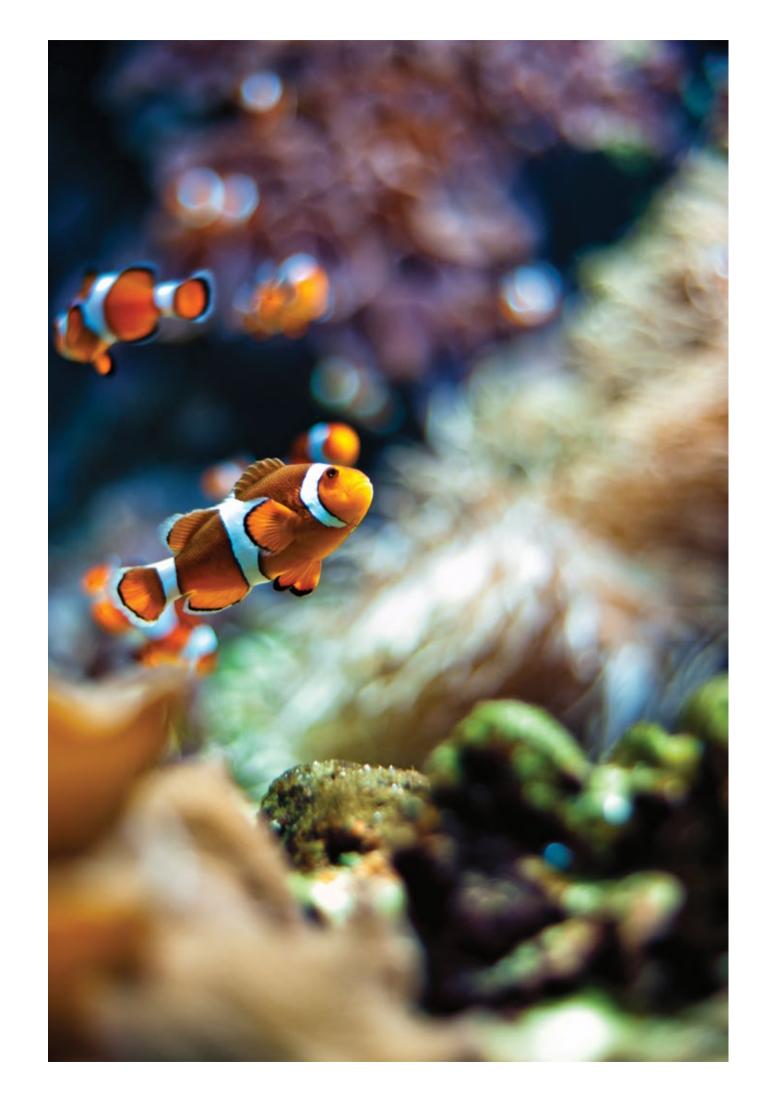


Our oceans are an infinite source of wonder. However the prevalence of unsustainable fishing practices in the seas around Langkawi have negatively impacted the marine biodiversity through habitat destruction.

The extensive use of non-selective fishing equipment, fishing over coral reefs and discarding of fishing gear in the water has increased the fragility of marine ecosystems, making recovery from natural and man-made disturbances more difficult.

The Fish for the Future programmes seek to address threats and imbalances to marine ecosystems, through enabling coral reefs to survive. Integral to the programmes are the recognition that all the different audiences need to benefit – nature, fisheries, fishers and tourism. We are also intending to work with the Department of Fisheries and the state government to gazette the bay as a marine protected area to safeguard the coral reefs of the bay in the future.

We have also partnered with MareCet, a non-profit conservation group, to assist in engaging with the fishing community in Langkawi. MareCet is dedicated to the conservation of marine mammals and is helping to spread the word about sustainable fishing and the proper management of marine biodiversity.



### Fish for the Future Programmes



### ARTIFICIAL REEFS

Artificial reefs are purpose-built structures that vary in size and have many entrances around it leading to empty and hollow spaces inside. The artificial reefs play two important functions: as an aggregating point for a variety of adult fish of varying sizes, some of which have migrated from fringing reefs nearby; and as a settlement site for coral larvae from the adjacent reef.

Following on from a study on the marine life and ecological patterns in Datai Bay, five custom-made artificial reefs were created and placed in January 2019. Since its insertion, the coral larvae from nearby natural reefs have attached themselves onto the artificial reefs and a proliferation of fish such as snappers have been noted. The artificial reefs are continuously monitored through underwater surveys and the structures cleaned of seaweed which competes with the coral for space and light.



### COMMUNITY OUTREACH

Our outreach programme consists of continuous engagement with the local community and schools to educate them on the importance of sustainable fishing practices and the wonders of our marine ecosystems.

Local fishers will be encouraged to fish around artificial reefs sustainably by simply using line and hook to maintain a source of income and a way of life, thus maintaining the fragile natural coral reefs. Fishers will also offer their catch at our beach to guests and the resort's kitchen.



### CORAL REEF REHABILITATION

'Coral of Opportunity' involves inspecting reefs at low tide in search of coral rubble – vulnerable or damaged corals fragmented from their base by natural storms or fishing nets. Although these corals are still alive, they are extremely weak and would not survive without intervention.

The corals are taken to the Coral Nursery at The Nature Centre for a second chance at life. They are placed in salt-water tanks with a support system to filter the water. After a period of about three to six months, when they have recovered and grown sufficiently, the corals are transplanted back to the natural coral reef, expanding the existing habitat and creating more space for life.

# Fish for the Future Partner



MareCet is a Malaysian non-profit conservation group dedicated to the research and conservation of marine mammals and the greater marine environment within Malaysia. MareCet is a portmanteau of the words *Mare*, meaning sea in Latin and *Cet*, a truncation of the scientific name cetacean, referring to the collective name for dolphins, whales and porpoises.

MareCet conducts research studies on specific cetacean species, sharing their learnings with relevant governmental agencies and local communities in order to translate data into on-the-ground conservation action. Their research projects include:

Langkawi Dolphin Research, their flagship project, investigating the population and behaviours of Indo-Pacific humpback dolphins and Indo-Pacific finless porpoises around the Langkawi archipelago and adjacent Kedah mainland; The Matang Dolphin Research Project in Perak; and the Dugong Research and Conservation Johor, where a critical habitat for Malaysia's dugong population is located.



"It seems to me that the natural world is the greatest source of excitement: the greatest source of visual beauty, the greatest source of intellectual interest. It is the greatest source of so much in life that makes life worth living."

DAVID ATTENBOROUGH

wildlife

FOR THE FUTURE

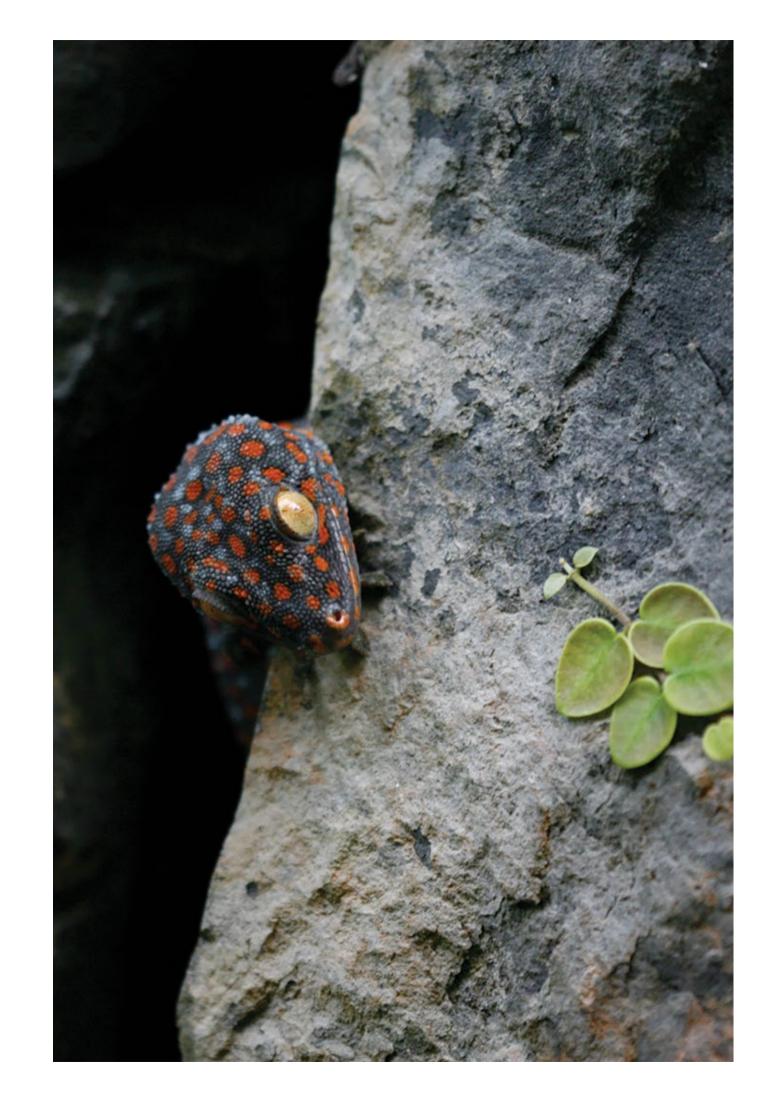
## Wildlife for the Future



Islands have been ideal places for unique species to evolve. They are also places of concentrated extinction, because these species are limited to the island or a particular part of the island and have low population numbers.

Natural factors such as disease, fire, storms and normal population fluctuations contribute to the extinction of the species. However, wildlife extinction is compounded by human involvement, with deforestation caused by rapid development being a key contributor. Deforestation is also the second leading cause of global warming that is linked to extreme weather fluctuations and flooding, of which there have been an increase in Langkawi.

The Wildlife for the Future programmes aim to protect and restore the natural heritage of the island using a holistic approach and responsible management. Our activities in partnership with Gaia, a local social enterprise dedicated to improving the protection and management of Malaysia's biodiversity, will allow nature to thrive once more and restore the links that will sustain both the wilderness and the foundations of human communities.



### Wildlife for the Future Programmes



### RECONNECT

In order for wildlife to thrive and maintain a healthy gene pool, large tracts of natural forest are required to provide sufficient shelter, food as well as a significant population size. In the last hundred years, Langkawi has lost nearly 50% of its natural wildlands; the remaining 50% is fragmented into six ecological zones.

This programme aims to mitigate the effects of fragmention by identifying and establishing a network of 'wildlife corridors' enabling the safe migration of arboreal wildlife between the fragmented wildlands. Corridors are created through rope bridges attached to trees located on opposite sides of a road, facilitating a safe crossing above and over the roads. Suitable tree species will be planted alongside roadways to create the corridors. These new trees will also aid reforestation efforts and reduce carbon dioxide emissions.



#### REFOREST

This initiative aims to combat the effects of deforestation through the replanting of trees. A native tree nursery has been established at The Datai. Once the trees are of suitable size and age, they are replanted as part of reforestation projects across the island.

The initiative will focus on growing native tree species, specifically food and nectar plants suited for birds, butterflies and mammals.



#### SUPPORT PROGRAMMES

Reducing the negative impact of human behaviour on wildlife habitats can only be achieved through creating awareness via education. This programme aims to educate and encourage all local stakeholders, including local authorities, farmers, schools, hotels and local businesses, of their role in reforesting, protecting and conserving the island's rich natural heritage.

A database of Langkawi's terrestrial vertebrae via camera trapping is currently in development.

Additionally, in conjunction with tree planting, due to the lower incidence of large trees with cavities used for nesting, artificial nesting boxes will be created to help boost the population of Great Hornbills.

Wildlife for the Future Partner



Founded in 2015, Gaia is a social enterprise dedicated to the wildlife conservation in Malaysia. Its name references the eponymous primordial mother or earth goddess in Greek mythology. Gaia's activities are centred around increasing scientific knowledge, implementing conservation actions and creating awareness of wildlife in Malaysia.

Their current programme is dedicated to the welfare of hornbills in Kinabatangan, Borneo, and in particular to the preservation of their habitats. Hornbills rely on natural cavities in trees for their nesting. These cavities are increasingly short in supply due to logging and agriculture expansion. Gaia's hornbill conservation and research initiatives comprise four areas: nest adoption, enabling local communities to guard natural nests from poachers; nest hollow restoration, enhancing and repairing tree hollows to make suitable nests; artificial nest box creation, providing more nesting opportunities for hornbills and reforestation; and field research on the trees on which hornbills consume and propagate.



"Education is the passport to the future, for tomorrow belongs to those who prepare for it today."

MALCOLM X

FOR THE FUTURE

### Youth for the Future



The future of sustainability lies with the youth of today. To effectively address issues on sustainability, climate change and human impact on the environment, young people must be included in the solution as they have the capacity to be the bringers of change.

Through young people gaining an understanding of and responsibility towards achieving a sustainable lifestyle, the broader community also becomes aware of environmental issues and challenges. Youth for the Future aims to educate young people through promoting a greater awareness of sustainability issues and inculcating them with the knowledge, actions and activities to create a sustainable lifestyle.

The programmes are being devised in conjunction with Green Growth Asia Foundation, a non-profit organisation responding to sustainability challenges in Asia, and is designed to educate youth on sustainability and conservation, and engender an appreciation of nature via teamwork and community engagement.



### Youth for the Future Programmes



#### SCHOOL PROGRAMMES

The Youth for the Future school programme aims to raise youth awareness and appreciation of conserving the environment and wildlife through strategic partnerships with organisations that are trailblazing this path to a more sustainable future.

We have identified local NGOs who are allied with a global school programme on implementing the United Nations Sustainability Goals combined with an emphasis on local focus and needs. Starting in the classroom and expanding into the community, it engages students via action-based learning. Activities include guest speakers from the resort and other partner NGOs, and sponsorship of after class activities.



### FIELD ACTIVITIES

As an early adopter of sustainability initiatives into our business operations, The Datai's sustainability team have numerous insights, anecdotes and practices to impart to the youth.

We aim to instil the wonder of nature in a fun and adventurous setting to encourage a spirit of exploration and learning. Activities include guided walks to learn about Langkawi's unique fauna and flora, education on fun and effective recycling and upcycling practices, as well as a visit to The Garden to learn about the benefits of a self-sustaining, organic food production system.



#### SOCIAL EVENTS

Engagement with their peers, school staff and the wider community is an important aspect in youth social development, and a great way to introduce sustainability and conservation activities.

Fun group activities such as beach cleaning days and sports tournaments with an eco-focus are devised and implemented by students to find sustainable solutions for their local community. With a wider community focus, the broader community also becomes aware of environmental issues, resulting in the green lifestyle advocacy multiplication effect.

Youth for the Future Partner



Green Growth Asia Foundation is a non-profit organisation responding to sustainability challenges in Asia through thought leadership and action. Green Growth Asia Foundation's principal objective is to take the lead in promoting a new growth strategy that strikes a balance between economic development, social inclusivity as well as environmental sustainability.

Their projects are divided into four key areas: economic growth, inclusive growth, environmental actions and sustainability education. One example of a major initiative is the Eco-Schools Programme which aims to make young people aware of the environmental and sustainability issues facing them in their school and community.

The programme is implemented by teachers with students undertaking a project that responds to a particular environmental need in their location.

The goal is to make a lasting impact on the students' attitude towards the environment and in doing so make them ambassadors for green issues for life.

For further information and to make a donation, please contact:

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Thank you

