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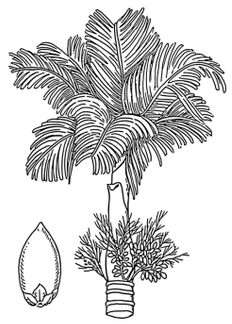
Sustainability Presentation



Driving Sustainability through promotion of Natural, Biodegradable & Compostable Palm Leaf Dinnerware

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1. What Sustainability needs today?

Sustainability aims at avoidance or reduction of depletion of natural resources to maintain ecological balance.

Current Global Sustainability Needs

1. 

Protection of Trees

2. 

Conservation of Water & Energy Resources

3. 

Products & Solutions that are less resource intensive

4. 

Renewable, Recyclable & Eco-friendly Products

1. Protection of Trees

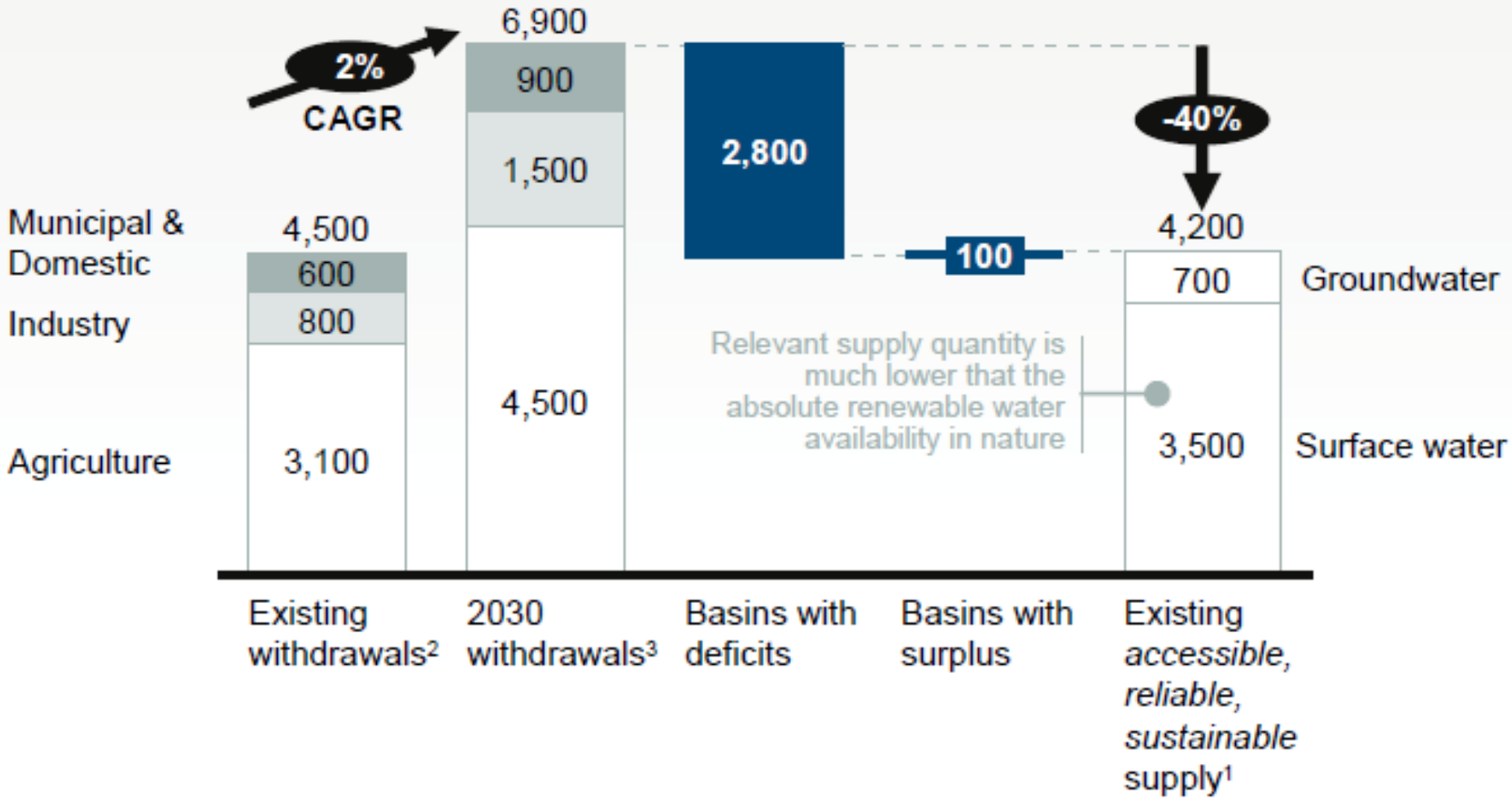
- Production of Paper & Wood products is depleting forest reserves and impacting biodiversity
- Exhaustion of forests and trees are causing impact to natural vegetation for animal habitat

2. Conservation of Water & Energy resources

- The global water scarcity problem is growing aggressively
- It is estimated by experts that by 2030, under an average economic growth scenario, global water requirements would grow from 4500 billion cubic metres to 6900 billion cubic metres causing an undersupply situation of over 40% *
- This would mean depleting water levels and higher need of renewable water supply

Aggregated global gap between existing accessible, reliable supply[1] and 2030 water withdrawals, assuming no efficiency gains

Billion m³, 154 basins/regions



1 Existing supply which can be provided at 90% reliability, based on historical hydrology and infrastructure investments scheduled through 2010; net of environmental requirements
2 Based on 2010 agricultural production analyses from IFPRI
3 Based on GDP, population projections and agricultural production projections from IFPRI; considers no water productivity gains between 2005-2030

SOURCE: Water 2030 Global Water Supply and Demand model; agricultural production based on IFPRI IMPACT-WATER base case

3. Manufacturing products & Creation solutions which are less resource intensive

- In the global use of conventional dinnerware alone, consumption of water & energy resources hold a prominent share due to dishwashing requirements
- Combined with dishwashing is the carbon emission as an outcome of using a dishwashing machine
- The average dishwasher uses 6 gallons of water per cycle; the average Energy Star-rated dishwasher uses 4 gallons per cycle, and their energy use ranges from 1.59 kWh per load down to 0.87 kWh per load. Using the Department of Energy's carbon dioxide emissions numbers of 1.34 pounds of CO_2 per kWh, that's 1.16 to 2.13 pounds of carbon dioxide emitted per load, to go along with 4 gallons of water. (Source: 2030 Water Resources Group)
- Additionally, recycling needs of sewage and drainage water are driving rise in recycling costs for country governments across the globe. At the same time, every recycling requires significant amount of energy, that leads to carbon emissions

4. Products that are renewable in nature, can be either recycled or that do not cause damage to environment upon degradation

- Problem of Plastics & Thermo-Foam disposable products that are clogging water bodies and soil causing environment pollution & biodiversity risks *
- Half of the 300 million tonnes of plastic produced every year is 'single use' i.e. disposable (Source: Marine Stewardship Council)
- Plastic pollution poses huge risks for marine & land animals; they end up consuming plastic as part of their food chain
- Bring down costs incurred by Government Administrations towards recycling

* Extract on Global Plastic Pollution

Source:

World Economic Forum Presentation

+ There are at least 5 trillion pieces of plastic in the global oceans
+ With another 8 million tonnes entering the water chain every year
+ By 2050, the oceans could contain more plastic than fish if plastic is not arrested
+ The Garbage Patch in the Pacific Ocean is now 3 times the size of France
+ It contains 1.8 trillion pieces of plastic
+ It is the largest accumulation of plastic in the world
+ 84% of the plastic found in the Garbage Patch had at least 1 toxin on the surface
+ The Great Garbage Patch threatens all life in the Ocean

2. How can Palm Leaf Dinnerware meet these needs?

Using a Naturally Fallen Leaf to create a chain of Sustainability,
which otherwise would biodegrade into the soil of the origin farm

1. How does use of Palm Leaf Dinnerware protect Trees?

- Fallen Leaves being used without cutting of trees
- No harm to trees or forest reserves, thereby retaining biodiversity benefits

2. How does use of Palm Leaf Dinnerware help conserve Water & Energy resources?

- Use of these natural disposable dinnerware replaces the need of dishwashing of crockery at gatherings, events, parties thereby saving water
- Water saved in Washing directly reduces recycling needs of water and energy needed to recycle water

3. How is use of Palm Leaf Dinnerware less resource intensive?

- No additives or compounds are used in manufacturing of these products
- Making them 100% natural leaf products
- With minimal use of water resources restricted to washing of collected fallen leaves
- Manufacturing process is only limited to imparting shape and size moulds and except this all of the processes are handcrafted, driving water & energy resources savings

4. How does Palm Leaf Dinnerware help save the Environment?

- Retention of natural leaf properties in its creation process
- Biodegradable
- Compostable
- Replaces plastic & thermo-foam disposable products which are the biggest threat to environment
- Goes back to nature with zero impact
- Protects air, soil & oceans; protects ecosystem & biodiversity

3. The Palm Leaf Dinnerware Life Cycle

WASHING & CLEANING OF LEAVES

SUN DRYING OF WASHED LEAVES

HEAT PRESSED TO GIVE SHAPES & SIZES

STERILIZE

GATHER FALLEN LEAVES FROM ARECA FARMS

NATURALLY MAKING PROCESS

ORIGIN

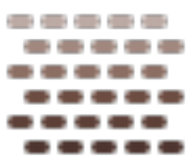
BEAUTIFUL TABLEWARE

BACK TO THE ENVIRONMENT

AT YOUR DINING

REGROWTH

COMPOSTABLE



BIODEGRADABLE

ECO-FRIENDLY DISPOSABLE

4. Bringing Natural & Eco-Friendly Tableware to Dining

Agrifold uses naturally fallen palm leaves from Areca Palm Trees in farms to handcraft and mould the washed and sun-dried leaves into creative shapes and sizes for elegant, eco-friendly disposable dinnerware and dining accessories.

5. Driving future Sustainability through Palm Leaf

Palm Leaf Dinnerware will continue to have increasing importance in eco-friendly disposable dinnerware, estimated to lead to a global sustainability scenario like below:

1. If Palm Leaf dinnerware consumption increases

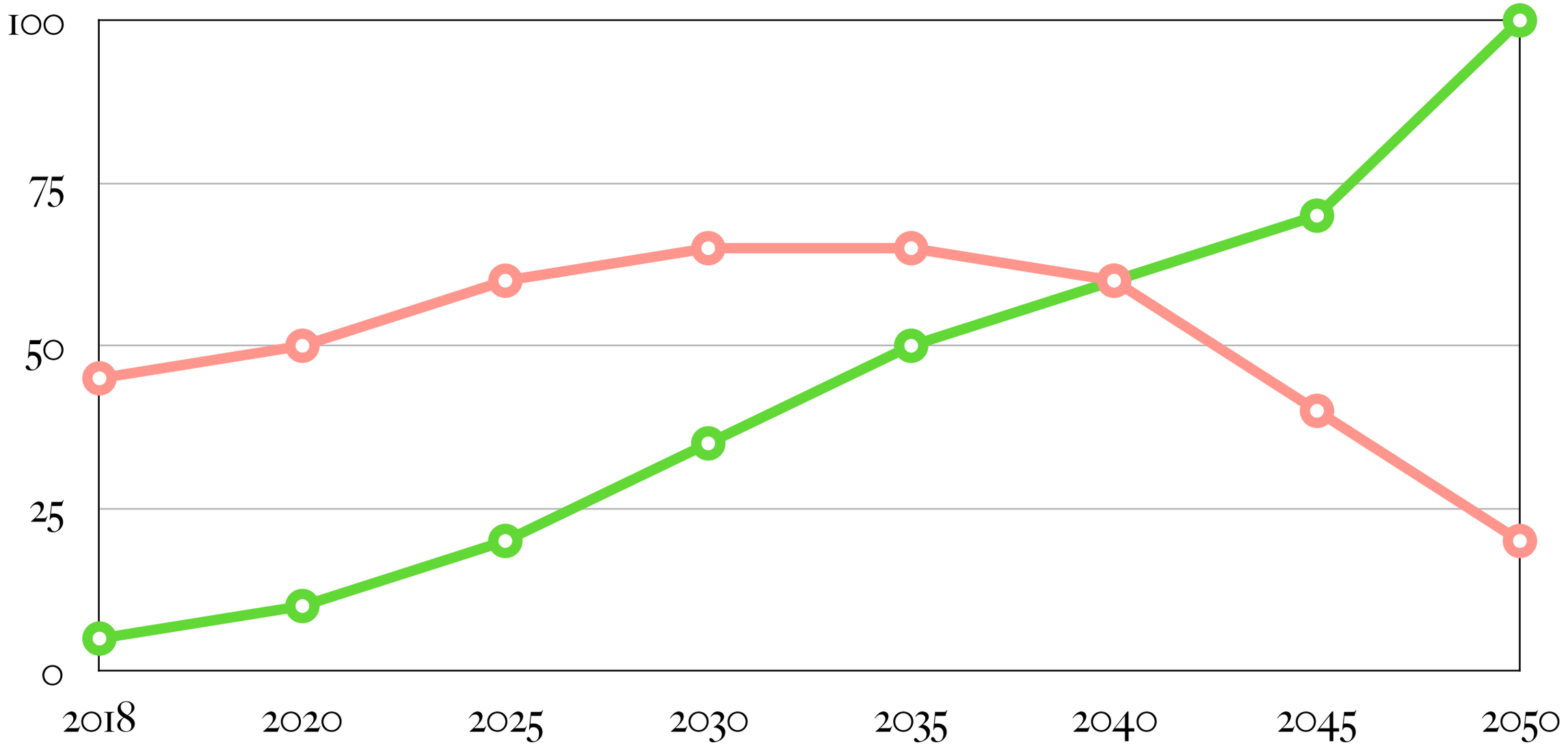
2. It would mean gradual replacement of plastic & thermo-foam disposable dinnerware consumption, which currently pose the biggest threat to the environment

3. Which would eventually replace plastic & thermo-foam disposable dinnerware in the consumption chain

4. Finally achieving plastic & thermoform disposable dinnerware to be even out of the global recycling chain completely

Logical Global Consumption & Recycling Plotting in Million Units:

Palm Leaf Disposable Dinnerware replacing Plastic & Thermofoam Disposable Dinnnerware in Global Consumption & Recycling chain



Source: Agrifold Hypothetical Representation 2018

Sustainability Comparison of Palm Leaf Disposable Dinnerware VS other Global Popular Disposable Dinnerware

Palm Leaf Dinnerware	Plastic & Thermofoam Dinnerware	Paper based Dinnerware	Cane Dinnerware	Bamboo Dinnerware
Raw Material Source >				
• Renewable Source • Products are made from fallen dry leaves which is otherwise wasted	• Plastics & Thermofoam are petroleum in nature • Not renewable in nature	• Majorly made out of recycled waste papers & chemically processed for achieving quality	• Made from Sugarcane waste using chemical pulp & bonding agents	• Bamboo Trees are cut to generate raw material
Biodegradability >				
• Naturally biodegrades in approx. 60 days or less once disposed	• Products made from plastics & thermoform are not biodegradable	• Majorly made with wax laminates, hence impacts the natural biodegradability	• Biodegradable in approx. 3 - 7 months	• Biodegradable in approx. 4 - 6 months
Compostability >				
• Products breakdown once disposed • Further become as fertilizer	• Products made from plastics & thermoform are not compostable	• Non-compostable • Their disposal adds to the landfill	• Not compostable in nature	• Bamboo is not compostable • Unless burnt, bamboo ends up in the landfill

We would love to hear from you around the world to collaborate on what we can do more for the environment with the use of these products.

Agrifold is consistently striving to promote the use of these Palm Leaf Tableware and dining accessories through sustainable raw material sourcing, manufacturing and supply methods for raising the protection of environment, ecosystem and biodiversity around.

agrifold

India Office

Suite 207, Level 2, Amalfi
Raheja Exotica
Near Madh Church
Madh Marve Road, Madh Island
Malad (W), Mumbai - 400 061

For any information or queries email us on:
info@agrifold.com

Learn more about our products & work on:
www.agrifold.com