SATHYABAMA

INSTITUTE OF SCIENCE AND TECHNOLOGY (DEEMED TO BE UNIVERSITY)

Accredited "A" Grade by NAAC | 12B Status by UGC | Approved by AICTE

www.sathyabama.ac.in

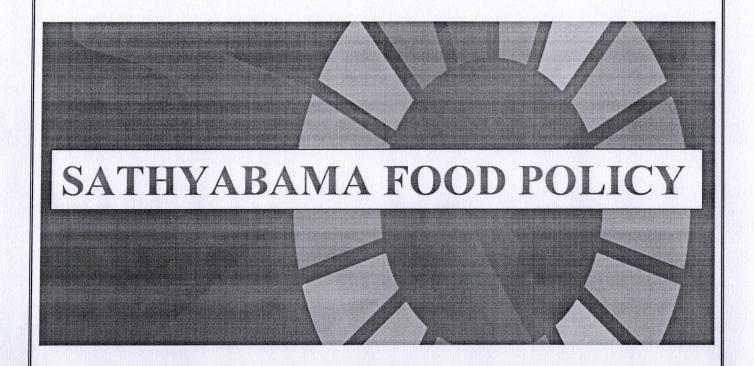






TABLE OF CONTENTS

S.No	Title	Page No.
1	Preamble	1
2	Need For the Food Policy Framework	2
3	Food Protocols Followed In Sathyabama Campus	5
4	Future 2030 - Sathyabama Food Policy Mandates	10

Editorial Team

- Dr T Sasipraba, Vice Chancellor
- Dr B Sheela Rani, Director Research
- Dr. D. Inbakandan, Scientist E, Centre for Ocean Research
- Dr. S.S. Dawn, Scientist E, Centre for Waste Management
- Dr. S. Prakash, Scientist C, Centre for Climate Changes
- Dr. Amit Kumar, Scientist C, Centre for Climate Changes
- Dr. Thanga Suja, Scientist C, Centre for Climate Changes
- Dr. K Nagamani, Scientist C, Centre for Remote Sensing and Geoinformatics
- Dr. Mary Kutty Abraham, Scientist E, Centre for Remote Sensing and Geoinformatics
- Dr A Chitra Devi, Associate Professor, School of Management Studies
- Dr Preethi Sheshadri, Associate Professor, School of Management Studies

St 12/10/20

SATHYABAMA FOOD POLICY

1 PREAMBLE

Sathyabama Education, Innovation and Research policies are designed explicitly to address the types of challenges to implement Sustainability targets in all aspects in a holistic approach. As a result, Sathyabama strategy on education will contribute to the sustainability of aquatic food systems specifically and food systems in general, and unlock opportunities to transition and shift these to deliver healthy, resilient diets and shared prosperity for all.

The food sources from land based or agricultural sectors are under unprecedented pressure. A rising population, global and local demographic and dietary shifts are changing what food we consume and how we consume it. As a result there is a greater demand on the systems that supply local and global food. Sathyabama food policy, if framed to focus on the better augmentation protocol of land, water, farm, forest and coastal resources towards the sustainable utilization and production of food, will help the supply and demand of the local community.

St 2/10/20

Key changes are taking place in the countenance of exhausting natural resources and a changing climate, placing limits on the amount of food we can produce and where we can produce it. Accepting how production and consumption of food contributes to and is predisposed by local grand challenges such as climate change and how this can be moderated is essential for a food system that does not direct to permanent damage to the humankind upon which we depend for our survival. Thus, Sathyabama Food Policy plans to work on a truly integrated understanding that would allow us to meet the disputes faced by the food demands of local needs. It is usual to pay attention to the food production system described in terms of "from farm to fork", and this has become a useful phrase to communicate the need for a holistic view of the food resources utilization. This contradicts its natural complexity and to overcome these complications, Sathyabama plan on education will contribute to the sustainability of aquatic and agricultural based supply systems specifically and food resources in general, and unlock opportunities to convert and transfer these to distribute healthy, resilient diets and shared prosperity for all.

2 NEED FOR THE FOOD POLICY FRAMEWORK

Global food demand is increasing, and severe questions stay behind about 12/10/20 whether supply can increase sustainably. Land based expansion is probable but

2

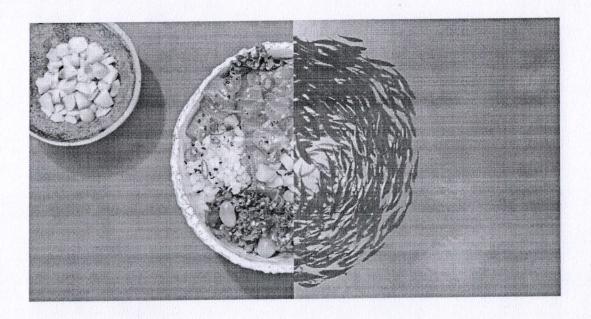
may intensify climate change and biodiversity loss, and compromise the delivery of other ecosystem services. As food from the sea represents only 17% of the current production of seafood supply, Sathyabama Education, Innovation and Research policies work on how much food we can expect the ocean to sustainably produce by 2050. Thus Sathyabama focuses on the main food producing sectors in the aquatic environment through capture and culture fisheries to estimate 'sustainable supply curves' that account for ecological, economic, regulatory and technological constraints. Thus Sathyabama overlay these supply curves with demand scenarios to estimate future food production from aquatic resources. As sustainability will depend on factors such as policy reforms, technological innovation and the extent of future shifts in demand, Sathyabama is planning towards the positive potentials by 2030 to deliver science and innovation that advance the transformation of food, land, and water systems in a climate crisis.

Food systems are not sustainable, and efforts to tackle this are paralyzed by the multifaceted networks of food system performers and dynamics that interrelate across local and geographic scales. Actions at the community level can positively contribute toward globally sustainable food systems. Assessing such contributions has two central challenges like, a lack of methods that support alignment between communities and across scales, balanced against the

12/10/2°

need to involve the community in developing relevant indicators; and the absence of adequate, fine grained data relevant to the community. Tackling a couple of these challenges, Sathyabama implemented a protocol that ropes community engagement, assessment and local contributions. Sathyabama engaged the students, faculties and researchers to work on the standard guidelines, directed by the Framework for Strategic Sustainable Development, to address these challenges. Thus, Sathyabama Food Policy Framework identified the action and outcome for the sustainable food systems.

Sathyabama Food Policy Framework's unique approach is that achieving a sustainable food future is as much a socio-cultural problem as it is technological, understanding the global nature of the food system while appreciating its impacts can be both local and global in scale. By placing the health of the environment, food and the local and student population at the core, Sathyabama Food Policy Framework is designed to compose aquatic and agricultural food systems more sustainable, and to develop the innovations that will allow us to live within the limits imposed by the resources available in the natural world.



3 FOOD PROTOCOLS FOLLOWED IN SATHYABAMA CAMPUS

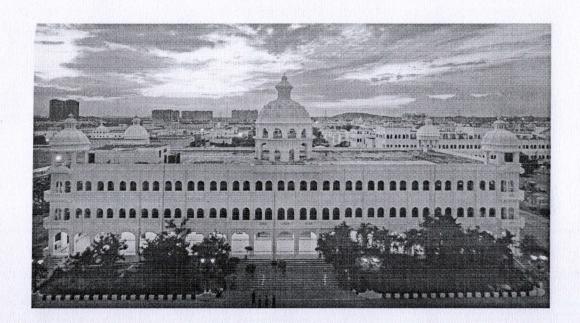
Apart from the food resources from the aquatic environment, the Sathyabama — Board of Governance approved the policy that Sathyabama only purchase safe, Farm raised meat, including mutton and poultry. In this illustration, "safe" means that the farms the Sathyabama purchases from will have compassionate, free-range animal facilities and will exhort from the use of hormones, antibiotics and animal protein feed. Sathyabama will more strongly follow the buy of organically certified meat as it becomes available, as the number of certified farms is at present limited. This background does not apply to above mentioned aquatic food supply.

Sathyabama's transformative agenda for education and research on aquatic food systems will focus on three main areas of impact that are crucially important: (1) climate resilience and environmental sustainability, (2) social and economic inclusion, and (3) nutrition and public health. The shift toward food systems research takes into account the four dimensions of natural, produced, human and social capital in food systems, from production through to consumption.

Sathyabama Education, Innovation and Research activities are structured around priority actions that respond to the Consultative Group on International Agricultural Research impact areas and the Sustainable Development Goals. These actions deliver measurable impacts through an integrated set of indicators to evaluate and track progress toward healthy and resilient diets and food systems sustainability, which is a critical step in building national transformative pathways.

Food demand is expected to increase by more than 50% in just the next 30 years as the world's population continues to grow—it's a challenge that can be met. Land and water stewardship can restore health to our food systems. Food is sustainable when it benefits the environment and maintains soil fertility.

Sathyabama Education, Innovation and Research are fostering innovations in technology, collaborating with communities to use resources more efficiently and promoting policies that enable sustainability. Thus, Sathyabama educates the student community to work together to secure healthy food and clean water for all people without sacrificing the environment.



The local farms and forest properties provide research and educational opportunities for Sathyabama students and faculty. At a local farm Sathyabama cultivates organic vegetables for the Sathyabama Students and Faculty Canteen. With each of these properties Sathyabama aims to steward the land in ways that contribute not only to the Institute, but also to our surrounding communities

Sti2/10/20

through extension programs, educational workshops, community organic farming, and more. Research in this area and on the health and nutrition value of balanced diets that include aquatic foods will guide the development of safe, convenient and healthy aquatic food products that meet and inform consumer demand and reach those who need them the most. Sathyabama work will focus primarily on Students, especially students and faculties of women, children, and adolescents who require high levels of multiple essential nutrients for good health and development.

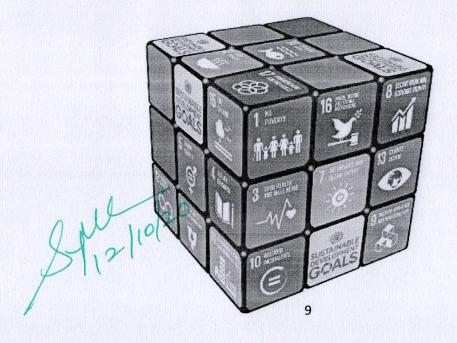


Sathyabama is also working with local actors to increase awareness on the health and nutrition benefits of aquatic foods, using successful social and behavior change communication approaches from the health sector. Sathyabama

Syl-10/280

research evidences will inform supply side interventions to (1) produce quality, healthy and sustainable aquatic food products (2) promote nutrition-sensitive aquaculture and polyculture systems, and (3) prevent the loss of aquatic food quantity and quality through innovative loss and waste technologies and improved practices as well as integrated farming systems with fish, rice and vegetables for balanced, nutritious and sustainable diets.

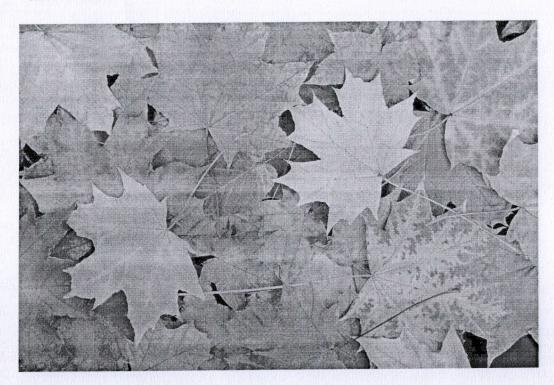
Drawing on an extensive consultation and assessment of challenges in the focus geographies and local communities, Sathyabama have built on the areas of work where Sathyabama has its strongest value proposition and legacy of impact. Based on emerging trends, Sathyabama have canvassed new opportunities, particularly in the areas of the blue economy, big data and digital technologies, alternative proteins, circular economy approaches to food loss and waste, as well as One Health considerations for people, animals and the environment.



4 FUTURE 2030 - SATHYABAMA FOOD POLICY MANDATES

- To achieve an increased understanding of living organisms with a view to increasing its application in the food industry
- To apply and adoptive research and development in post harvest processing, preservation and value addition of now food stuffs that will address the global challenges
- To encourage research and development for creating environment friendly methods to utilize the food resources from aquatic and agricultural in a sustainable way
- To implement the awareness on food waste and food industrial wastes for increased economic returns of the producers and processors
- To design the education and training for creating strong human resource capacities to work towards better out come from sustainable food system
- To train for upgrading the skills of academicians, research students and food processing entrepreneurs and manpower for promoting growth of sustainable food system and entrepreneurship
- To practice the sustainable food system in the institution, by procuring and utilizing food that is farmed and harvested in environmental friendly way from the local area 8/12/10/20

- To educate and engage the local community to protect the aquatic ecosystem from degradation due to over exploitation
- → To partner with NGOs, Institutions and with Volunteers to propagate the
 need of sustainable food system and for the protection of local
 environment



Sti2/10/20.