



**SAFE**  
ISO 14001:2015

*Service to His Creation is  
Service to Mankind*



[www.safeinch.org](http://www.safeinch.org)



## Organizational Status

SAFE is a registered non-profit civil society organization working at science-society interface towards sustainable environment development and poverty alleviation in the Indian eco-region of South Asia since year 2004. A major stakeholder in UNEA and in Consultative Status with ECOSOC, UNFCCC, Gender-CC.

SAFE is a Not-for-profit, community based civil society organization registered under Trust Act of India 1861 & u/s 12A & 80G of IT Act of India, FCRA u/s 11(1) and accredited by Niti Ayog, MoEF & CC and Central Social Welfare Board, Govt. of India.

## Mission of SAFE

SAFE works at science-society interface to achieve sustainable environment development and poverty alleviation through adaptive change management towards inclusive growth, community resilience and empowerment of commons.

## Vision of SAFE

SAFE envisages global partnership in the milieu of climate change for developing an equitable and participatory policy framework for resource management towards sustainable environment development, technology cooperation and knowledge economy.



To address the impending impacts of climate change can be ascertained only by forming strong alliances and through global participation. SAFE has a focal directive on Sustainable Development Goals, and for this proactive partnerships are extremely valuable to SAFE and is integral part of the organization's work approach.

SAFE believes that it is important to highlight the collective action across various sectors towards climate initiatives in Indian eco region as this will enrich our collective delivery and ascertain our nation's climate commitments in the global arena.

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# Hydroponic float farming and Aqua-farming for Building Capacities towards Climate Smart Agriculture



The objective of the proposed intervention is to naturalize hydroponic float-farming and aquaculture as an adaptive, integrated climate-resilient agricultural contrivance for climate vulnerable communities of coastal and riverine floodplains, thriving in resource-poverty trap, towards sustainable livelihood and inclusive growth. The intervention proposes hydroponic technology in organic float-farms, fed by solar desalination unit and micro-irrigation system, as a collective farming practice, in inundated rural farmlands. It integrates advanced aquaculture and agrobiodiversity conservation through regenerative no-tillage agriculture in grow-bags on floating platforms along with plantation and coastal

embankment stabilization to prevent erosion due to flooding, assuring both habitat conservation and alternative livelihood for indigenous marginal farmers and fishers sustaining below poverty level. Innovation lies in its adaptive design approach and circularity of technology transfer for risk spreading. It leverages circular economic benefits through agro-waste recycling for sustainable intensification of primary productivity to appeal 'green financing'.





# Conservation of Wetlands & Ecosystem Services (Biorights)

Conservation primacies for wetland ecosystem is in the central tenet of climate objectives for South Asian Forum for Environment [SAFE] and leading the wetland advocacy at community-science interface have been our strategy in propounding ecosystem-based adaptation for communities dependent on wetland's goods and services, especially in the urban fringes and as well in the vulnerable coastal flood plains. The reason for prioritizing wetland conservation has been simple, the unique biodiversity in the wetland ecotone owing to the edge effect, dependance of urban poor on the ecosystem services of periurban wetlands and the policy fallacies in conserving the most subtle yet significant ecosystem. SAFE works on wetlands conservation as mentioned below:

- SAFE has been successful in propounding 'Biorights' of Wetlanders as a fiscal conservation paradigm that compensates the opportunity costs of marginal wetlanders through Payments from Ecosystem Services.
- Sustainably intensify the ecosystem services of wetlands that sustain the food and livelihood security of marginal communities at the bottom of economic pyramid .
- Enthuse consorted action-research in wetland management and conservation of wetland biodiversity through knowledge economy and reciprocal partnership of the stakeholders.



# Clean drinking Water, Sanitation (Circular-WASH) with Solar Energy Solutions



SAFE has been a strong advocator of green energy solutions and sustainable lifestyle from its inception. Among many initiatives commenced as part of energy solutions, the organization has shaped two programs for providing safe drinking water to urban slums named WASH-US (Water Sanitation and Hygiene for Urban Slums) and NEWSUP (Nonconventional Energy in Water and Sanitation for Urban Poor), both of which, not only using but also generating renewable energy. The projects provide solar powered water treatment plants, each delivering 10,000 liters of clean drinking water per day to the community through automated dispensing unit and cater to nearly 35000 marginal people, in urban and rural areas of West Bengal, and North-East India. SAFE



Water program for poorest of the poor, the integrated solution includes solar powered water treatment plants are used to deliver clean drinking water on a 24x7 basis to the communities. In addition, rain water harvesting, bio-sanitation along with bio-gas units makes it a circular model. SAFE solar WASH projects have propounded an innovative circular design for a sustainable and gender equitable circular economy towards climate adaptive lifestyle of urban poor to facilitate basic amenities like water, energy, and sanitation with minimal emission footprint.





# Integrated Solid Waste Management (Circular Design) & Waste to Energy Program

Under the ISWM program of SAFE, Resolve Trash to Cash is an initiative now evolved as women-led micro-small-enterprise to recycle urban municipal wastes including wet-waste, paper, textile, and plastics. The revenue returns suffice the livelihood of women waste-workers surviving below the poverty line, and mainstreaming them as artisan entrepreneurs. The intervention facility has the potentials of abating emissions upto 60700 MTs of net carbon equivalent per annum, generating 1700 man days, 480 tons of compost; almost 500 KWH energy an average. Discarded textiles recreate micro utility household products by building capacities in the 'Art of Recycling' among



informal waste-pickers and slum dwellers of Kolkata. The recycling workshops of SAFE, handles 7-8 metric tons of municipal waste every day that would otherwise have gone in waste dumps located within the city's wetlands. The current initiative entails public awareness campaigns, and involves students through hands-on sustainable lifestyle and education curriculums. ResolveTrash2Cash is scaled in Guwahati, Assam, Bangladesh and Bhutan with regional partners and is working at grassroots level to build the 'Art of recycling'.

# Forest, Agroforestry & Community



Restoration of mangrove forests, seagrass meadows, marshes, and kelp forests with community participation has been implemented by SAFE as part of its coastal conservation and blue carbon initiative. These restored ecosystems have the potential to act as carbon sinks and foster a greener planet. The multiple agroforestry programs undertaken by SAFE, aims to increase green cover by promoting fruit tree plantation, mangrove restoration, and facilitate community-based restoration approaches, empowering women self-help group for revenue generating framework on plantation and plant nursery development.

**S**AFE under a collaborative partnership with stakeholders promotes wise use of natural resources and protection of forest areas through community governance and inclusive growth for sustainable development. It aims to address environmental issues especially with reference to water energy and food security through community-based conservation initiatives for which it conducts action research at science society interface for SDGs assuring alternative livelihood through risk spreading and coverage in the milieu of climate change.





# Ecosystem, Community, and Climate Change



Nature services are equally important as nature's goods. SAFE is engaged in building capacities among policy stakeholders in the 'science of pricing ecosystem services' for enabling ecosystem-based adaptation for a sustainable future. The project, supported by APN Japan aims at quantifying the economic advantages, evaluate societal dimensions, and as well assess the potential risks of monetizing ecosystem services in the climate milieu. It will acquaint the policy planners with the latest scientific and economic approaches to defining, evaluating, and pricing ecosystem services in the Asian

context as well as develop and validate an appropriate framework for incorporating ecosystem service pricing system in EbA approach towards policy implications in government practices through participatory action research (PAR) at community-ecosystem interface. This intervention attempts to bridge the gap in implementing ESs into real world scenario owing to uncertainty information and limited data environment by using machine learning algorithm towards error minimization.





# Air-quality and Smoke Free World



**D**eteriorating air-quality has been considered as a major emerging problem in South-East Asian countries due to its direct impact on both health and climate. Recent studies revealed, seven of world's ten most polluted cities are in India, killing approximate 1.24 million people in 2017. Involving citizens in extended scientific interventions can act catalytically for stimulating mass behaviour change and as well in building coordinated action for reducing poor air-quality. Changing of collective behavioural response is

necessary to provoke civic action against elevating air-pollutants by building of social capital among different communities. To address the limitations of incognizance about the proper awareness and knowledge gap in spatio-temporal distribution and source segregation of air-pollutants, this intervention attempts to connect also with smoking habits of millions, SAFE with the support of Foundation for the Smoke Free World, the intervention has undertaken need assessment survey for identifying the psycho-biological and societal drivers in such similar underprivileged communities of India, Bangladesh & Nepal so that a cohort-level sustainable tobacco cessation program can be recommended, based on immediate needs of the beneficiaries. This project attempts to recommend an adaptive and sustainable community program for tobacco cessation, as a 'common good' for reducing the harm from tobacco smoking both for environment and health.



# Satoyama Initiative in SEPLs of Eastern Himalayas



The International Partnership for the Satoyama Initiative (IPSI) has been working with its diverse partners to promote various activities on the sustainable use of socio-ecological production landscapes and seascapes (SEPLS) in both developed and developing countries since its launch in October 2010. To further promote the implementation of IPSI activities, the Satoyama Development Mechanism (SDM) was jointly established by UNU-IAS, IGES and the

Ministry of the Environment, Japan (MOEJ) as a collaborative activity under the framework of IPSI. SAFE being an active partner to this initiative is working on the SEPLs in Arunachal Pradesh to achieve sustainable intensification of ecosystem services to conserve biodiversity in the agricultural production landscape of Eastern Himalayan Terrain.

This thereby seeks to ensure food security and improved livelihoods of the agrarian indigenous communities of the eastern Himalayas. In view of new challenges, such as raising temperatures, shifting of terraced fields to higher altitudes or clearing valleys, the current situation demands an adaptive framework for planning how to conserve the production agriscapes through a sustainable intensification of ecosystem services. The project therefore intends to map the changing trends of indigenous farming practices on a geospatial platform to identify the drivers of change and as well as assess its direct impact on local agrobiodiversity and ecosystem services and its tandem effects on local livelihood and wildlife habitat.





# SAFE crisis response in COVID Pandemic

**S**AFE formed its crisis-relief work team in year 2009, during the Aila cyclone that had devastated Sunderbans. Since then, the organization has gained significant experience in helping people during such unprecedented crisis, with help of partners and trained volunteers. Since end week of March 2020, the COVID-19 outbreak was racing across the planet. The unprecedented situation pushed the world into a crisis most severe in its recent history and the impact unseen. As the world witnessed the pandemic situation to intensify and spread, with almost half of the humanity under lockdown by April and easing from mid-June, the global death toll passed over 2.6 million. On 7th April, World Health Day, 2020, SAFE launched the COVID relief with community health services, and since then it has



been fortified by a collective effort with esteemed partners to continue to reach out to vulnerable communities with telemedicine facilities and Community Health Centres to conduct free health consultations. SAFE acknowledges the partners for support in helping us reaching out to over 12000 ultra-poor families with essential grocery, medicines, sanitizer, masks and continued health care services through the COVID pandemic time. SAFE with support of partners is successfully running eight community health centres in both rural Sunderbans and peri-urban Kolkata.

## Center for Community Resilience Adaptation and Climate Knowledge (CRACK)

**C**enter for Community Resilience Adaptation and Climate Knowledge (CRACK) is integral to the community climate-change adaptability program of SAFE. The CRACK Center is the first of its kind, 'Living Lab' in the nation to research and develop resilience to climate change in Sundarbans.

- Creating opportunities for Community preparedness through technology cooperation.
- Develop grass-root based action research and resilience in climate vulnerable coastal areas, flood plains and drought prone landscapes.
- To work towards the Sustainable Development Goals, with focus on climate action, food security and poverty alleviation.
- Developing Germplasm Conservation Unit and Endemic Seed Bank for natural resource management. Currently in-situ conservation of 52 varieties of salt-tolerant local rice is achieved by building capacities of local communities in Sunderbans.
- Installing Referral Agricultural Cyber Center for post disaster agro-environmental crisis management.
- Extending Capacity building-facility for climate adaptive alternative livelihood.





**S**AFE is a major stakeholder in United Nations Environment enjoys consultative status with United Nations Economic and Social Council [ECOSOC], and as well an observer organization by United Nations Framework Convention on Climate Change [UNFCCC]. It is a networking member to UNESCO, Asia Pacific Network for Global Change Research [APN-GCR], GDN, CANSA, GEF-CSO Network, World Association of Non-Governmental Organizations [WANGO], International Water Association [IWA]. A meticulous effort to put the environmental conservation with poverty alleviation into practice has enabled SAFE to partner with Ministry of Environment & Forests, Govt. of India, Department of Municipal Affairs, Govt. of West Bengal. Guwahati Municipal Corporation, Assam, MoEF, MoC, Govt. of India, Department of Land Resources under Ministry of Rural Development, Meghalaya Urban Development Authority, National Bank for Agriculture and Rural Development [NABARD], Indian Council of Agricultural Research [ICAR], Central Inland Fisheries Research Institute [CIFRI], Birla Industrial & Technological Museum [BITM]. SAFE's valuable partners and institutes comprise of U.S. Consulate Kolkata, German Consulate, Kolkata, HSBC Bank, Pricewaterhouse Coopers Pvt Ltd [PWC], PWC Service Delivery Centre [SDC], Lexmark, IBM, DLF, Arohan Financial Services Pvt. Ltd.



## Accreditations & Affiliations

- Major Stakeholder & Governing Council Member: UN Environment
- Consultative status with ECOSOC in UN-DESA
- Observer status with UNFCCC, UNCCD & GCF
- Member GEF-CSO council of World Bank
- CSO Member to UN-WOMEN & GENDER-CC
- Member, World Water Council, World Rural Forum
- Member: Climate Action Network for South Asia (CANSA)
- Accredited by: MoEF&CC, Govt. of India, Niti Ayog Govt. of India, NABARD
- Member, Central Social Welfare Board, India
- Member, National Disaster Council of India
- Member, NGO Darpan, Niti Ayog, Govt of India
- Networking Member, GEF-CSO, APN-GCR, GDN & Earthday Network
- ICAR- Central Agricultural Forest & Research Institute, CAFRI

## SAFE Awards : 2010 to 2022

- Winner of the Inclusive GEF Assembly Challenge Program 2023
- ISAF Institutional Award for outstanding contribution in Agroforestry, 2022
- EIILM, Kolkata and TIMES Ascent Eastern India Leadership Awards, 2022
- Winner of The Mohammed bin Rashid Al Maktoum Global Water Award 2021
- Finalist for World Design Impact Prize, 2021
- Finalist for ASHDEN Award, 2018 & 2021
- CII Design Excellence Award 2020 1st prize in WASH innovation with HSBC.
- Finalist for the Equator Award 2019, UNDP
- Inequality Challenge Award 2018 GIZ, Germany
- FICCI Water Awards 2018, 1st Prize community initiatives by industry category, to HSBC in partnership with SAFE
- Most Innovative Development Project Award 2017, Global Development Network.
- The Hogan Lovell's Award 2017 for community solar innovation in WASH
- Gender Pioneers for a Future Detoxified' Award 2017 from Basel, Rotterdam & Stockholm convention.
- APN-GCR 'Mitra Award' 2017 for young scientists of SAFE
- UN-DESA 'Powering the Future' Award 2016.
- 'UN Water' Award, 2015 for 'Best Management Practice' in WASH services.
- Lighthouse Activity Award 2014, UNFCCC for RESOLVE Trash 2 Cash project.
- Development Marketplace Award 2014: World Bank.
- International Award 2014: Match International Women's Fund.
- UN-HABITAT Award 2013.
- Asia Green Award 2013.
- Earthcare Award 2011.
- Eco-Peace Leadership Award (UNEP) 2010, 2012, 2016 and 2018

## Communication with SAFE

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## Regional Partners

BARCIK

Dhaka, Bangladesh, [www.barcik.org](http://www.barcik.org)

Onushandhani Creeds (O.creeds) Ltd

Dhaka, Bangladesh, <https://ocreeds.com>

SABAL

Saptari, Nepal, <https://sabalnepal.org.np>

RENEW

Thimphu, Bhutan, [www.renew.org.bt](http://www.renew.org.bt)

MDI-Nepal

Makawanpur, Nepal, [www.mdinepal.org](http://www.mdinepal.org)