

NIRAS Asia-Pacific

**Over three decades of partnership
and collaboration**



Building Sustainable Societies in Asia-Pacific

With over 30 years of continuous presence across the region applying integrated and innovative approaches, NIRAS has helped facilitate Asia-Pacific's journey towards inclusive prosperity and a sustainable future.

Owned by a foundation and its staff, the NIRAS Group is an international multidisciplinary consultancy firm with Nordic roots and values. With around 2400 staff across business areas all geared towards building sustainable societies, we design, implement, and manage projects and investments that bolster sustainable economic development, enhance livelihoods, reduce inequality, improve education and health, and improve resilience of structures and systems.

In fulfilling our purpose of building a more equal, stable and sustainable world, we aim to be a recognised driver of positive change and innovation in sustainable develop-

ment at local and global levels. As a values-driven consultancy company powered by a diverse team of committed professionals, we will achieve this by innovating, generating solutions, and sharing knowledge in collaboration with peers, clients and partners.

On an annual basis, we implement over 380 development assistance projects in more 100 countries across the globe, including 26 countries in the Asia-Pacific region.

With a presence in Asia-Pacific that has endured for three decades, we are proud of the contribution we have made to the increased sustainability of development in the region. In the last ten of those years, a variety of clients have awarded NIRAS close to 300 projects in countries across Southeast, South, Central and East Asia as well as the Pacific.

Spurred on by massive economic growth, the rapid development of the world's most populated region has led to a tremendous reduction in poverty and translated into strengthened skills and available economic resources. This change has been nothing short of transformative - and naturally necessitated an adaptation to evolving needs and challenges over this period. With all its positives, the transformative growth of the region also has come at a cost. Environmental degradation and destruction, losses in biodiversity, significant increases in greenhouse gas emissions, waste, increased inequality and socioeconomic marginalisation have all contributed to a less sustainable, less predictable region with increased vulnerabilities and fragilities especially when it comes to the climate crisis.

In line with our motto *We Listen, We Learn, We Deliver*, we build on our strengths while we keep learning, deepening and developing our knowledge base. Our journey

in Asia-Pacific is therefore a story as much of services delivered as one of learning and continuous improvement and adaptation.

Over the years, the development landscape in the region has also evolved with skills, capacities and financial resources being vastly more available than earlier. Growing with the region, NIRAS has invested in local offices to build long-term partnerships including recruiting and nurturing talent in inspiring workplaces. The NIRAS team holds increasing engineering and other technical capabilities in the region in areas such as renewable energy, water treatment and process engineering. These add to the vast technical skills already available across the global NIRAS Group office network, a matrix organisation that we use to full effect to ensure the best skills are accessible for the relevant task at the right time.

NIRAS delivers tailored, innovative, value-creating, and results-driven solutions to enable our clients and partners to achieve their goals. We do this by providing transformative support for positive change, addressing root causes, and magnifying impact through flexibility in implementation, capturing SDG-linked results, and celebrating successes.

Local presence matters to us, and with established offices in Australia, Cambodia, Indonesia, Lao PDR, Nepal, the Philippines, Viet Nam, and Taiwan, we offer our partners a rare combination of local understanding, technical expertise,

cost-efficient administration, and European best-practice governance and management systems.

In the past years, our efforts to strengthen the regional organisation have only gained traction. The NIRAS Asia Regional Head Office in Manila has a twofold mandate to lead the regional organisation and serve as a focal and specialised office towards the Asian Development Bank. Our goal is to forge an ever stronger presence and partnerships in the region to provide our services increasingly using local talent and expertise, while always continuing to add value with our European and global technical expertise and knowledge, management standards and highest levels of professional and business integrity.

Standing firmly with our clients and partners, NIRAS is fully committed to be part of the solution to achieve a sustainable and resilient Asia-Pacific in the 21st century. We share, learn from, and build on evidence and knowledge generated within the projects we facilitate. And we always have the ambition to do more, be this introducing new services, tools and approaches or demonstrating how outcomes can be scaled up and replicated elsewhere. As you will read on these pages, NIRAS's story is the achievements of our clients.

We look forward to collaborating with governments, funding agencies, the private sector and other partners in building a sustainable future. Join us as we contribute to improving livelihoods and creating societies that are inclusive, stable, and climate-smart.

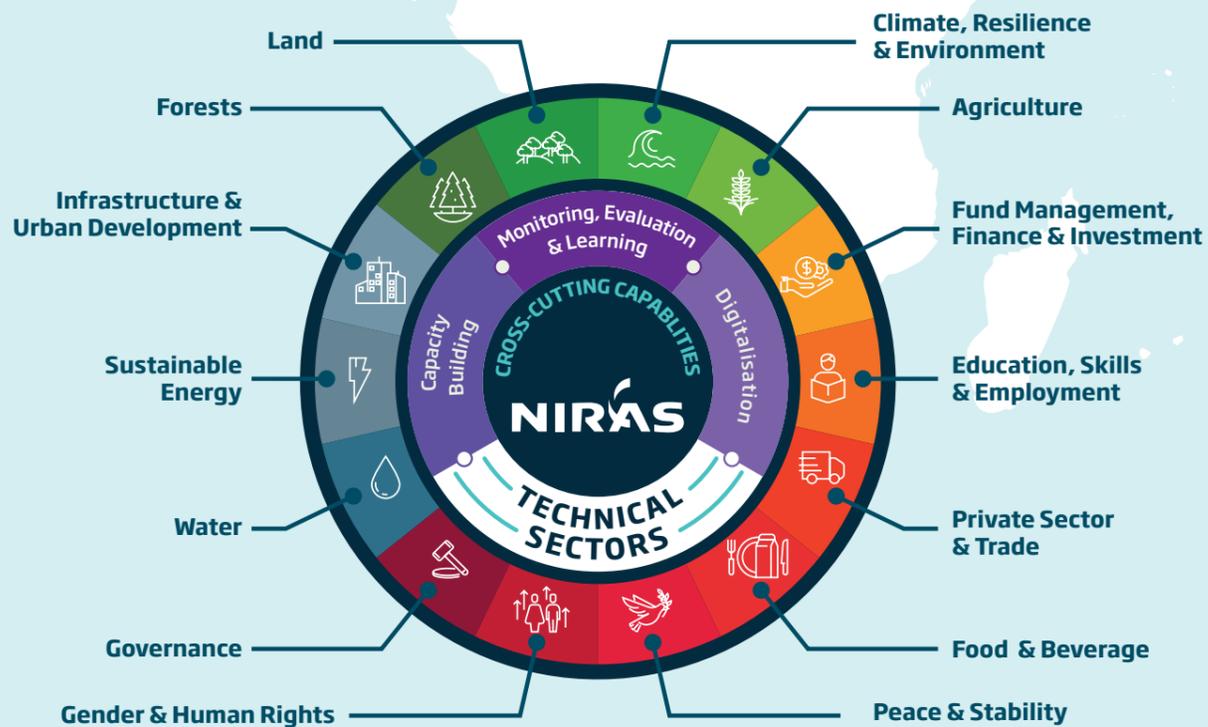
Antti Inkinen
Asia Pacific Regional Director



A snapshot of NIRAS in Asia-Pacific

N NIRAS office

Our work across sectors in the region



Cross-cutting competencies

NIRAS adds value through its cross-sector expertise and ability to deliver successful outcomes in large, complex projects. We offer **state-of-the art results-based, value-for-money project management** and **quality assurance** incorporating the latest knowledge in planning, programming, and measurement. Our methodology and tools have been carefully designed to ensure that best practices and internationally approved standards are utilised, risk is effectively managed and quality outputs are delivered on time and for the benefit of stakeholders.

Conducting business with **integrity** is a fundamental principle at NIRAS and key to serving our clients in accordance with our values. Our unwavering ethical principles, based on trust, respect, honesty and integrity, empower our employees to conduct business the right way. Our uncompromising ethical standards and Code of Conduct, which include a zero-tolerance policy to corruption, tax evasion and fraud as well as any form of modern slavery, discrimination and harassment, are central to everything we do, and we only do business with those who uphold the same standards. Fulfilling OECD recommendations, NIRAS has established an Integrity Management System (IMS), based on both the FIDIC model and Transparency International's Assurance Framework for Corporate Anti-Bribery Programmes.

Some of the services we deliver cut across themes and deserve special attention.



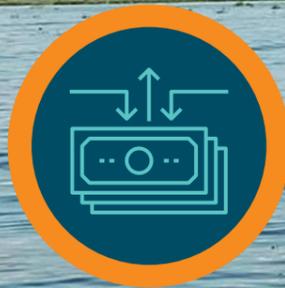
DIGITALISATION

- Building capacity around effective use of statistics and data
- Evaluating complex interventions using innovations
- Use of blockchain, AI, drones and the 'Internet of Things' in collection, storage, and access of data
- Embedding digital and traditional data into evidence-based policy-making cycles
- Data quality and innovation strategies, for digital and traditional data
- Reviews of M&E systems and using data well and differently therein
- Data management and MIS systems
- Digital solutions for project and fund management
- Online and mobile solutions for key development challenges
- Remote sensing and geospatial solutions
- Innovation sector support
- Advice to the public sector on creating an enabling environment for digital best practices and data security



MONITORING, LEARNING & EVALUATION

- Practical, contextually tailored and methodologically rigorous
- Innovative technology-based data collection with bespoke tools tailored to programme context
- Technical in-house staff and extensive global network
- Keen understanding of how to transmit and use knowledge to strengthen organisations



FUND MANAGEMENT

- Design of grant management procedures (operational manual, application guide and forms, inject lessons learned)
- Management of calls (launch, screening and evaluation, notification)
- Grant project implementation (awarding & contracting, managing & monitoring, fund disbursement & technical support, contract closing)



GENDER EQUALITY AND SOCIAL INCLUSION

- Gender analysis and mainstreaming
- Human rights-based approach
- Social inclusion approaches
- Women's economic and political empowerment
- Women's influence in decision-making and power
- Gender budgeting and gender responsive procurement
- Women, peace & security
- Men & boys



FACILITIES & FRAMEWORK CONTRACTS

- Management and implementation of large, complex framework and facility contracts
- Access to network of +35K experts around the globe
- Dedicated global unit with +30 employees offering 24-hour service
- In-house technical sector expertise for backstopping and quality assurance



CAPACITY-BUILDING & TRAINING

- Context-specific, locally driven and collaborative solutions
- Problem-based, adaptive and tailored pedagogic approaches based on transformative and participative adult learning
- Integrated technical and vocational training of individuals with capacity strengthening of organisations and agencies
- Digital techniques and tools for training and learning



COMMUNICATIONS & VISIBILITY

- Communications strategy
- Quality assessment
- Graphic design
- Copywriting & editing
- Storytelling
- Videography
- Script writing
- Branding and corporate ID
- Social media
- Photography
- Training on communications

SERVICES

- + Agribusiness development
- + Food safety & quality systems
- + Food security & nutrition
- + Mainstreaming climate-safe practices
- + Access to finance & fund management
- + Capacity development

With more 50 years' experience, NIRAS has a proven capacity to successfully implement large, multi-sector programmes covering agriculture, food security, nutrition, and rural development in challenging and fragile working environments. We provide technical expertise for both crop and livestock production, from farm to table, combining consumer and agri-business interests into viable and sustainable value chains.

Agriculture can be a driver of rapid inclusive, green growth, and job creation. Where gainful agricultural production exists, conflicts are rare and people can lead decent lives. Efficient use of resources and adaptation of farming techniques raise productivity. Access to energy enables local processing while transport infrastructure connects farmers and markets. Food security enhances nutrition and learning in school. Commercial farming brings capital to remote rural areas and facilitates trade. Building local government's competence in land-use planning creates resilience and helps protect forests, watersheds and biodiversity.

In promoting good governance, NIRAS catalyses inclusive rural transformation via policy and institutional reforms, decentralisation and local empowerment. We strengthen the capacity of ministries and public and private actors to create enabling business environments and attract rural investments.



The Agro-Biodiversity Initiative (TABI)

CLIENT: SDC
COUNTRY: Lao PDR
DURATION: 2009–2011; 2012–2016; 2017–2021
VALUE: EUR 20,000,000 (all 3 phases)



With innovative landscape planning methods, TABI improved rural livelihoods in northern Lao PDR while preserving the biodiversity of natural resources for sustainable growth. Over 100 projects were piloted empowering rural communities to engage in biodiverse farming practices that produce high yields while simultaneously supporting the persistence of wild indigenous species.



The EU "Promotion of inclusive and sustainable growth in the agricultural sector: fisheries and livestock" was a 5-year €3.5M project in Cambodia. The goal was to improve productivity and diversification of agriculture sectors; promote market access of agriculture products; strengthen institutions; and sustainably manage fishery resources.

Core Agriculture Support Project (CASP) II

CLIENT: ADB
COUNTRY: Mekong region and China PDR
DURATION: 2016–2018
VALUE: EUR 4,100,000



Building on the earlier phase of CASP that emphasised cross-border agricultural trade and climate change adaptation, CASP II strengthened value chains and enhanced global market access for the region's climate-friendly agri-food products through capacity building, business development, and improved regional agriculture and policy networks in Cambodia, Lao PDR, Myanmar, Thailand, Viet Nam and the People's Republic of China.

Enhancing Rural Livelihoods and Incomes Project (ERLIP)

CLIENTS: MOALI, DRD & ADB
COUNTRY: Myanmar
DURATION: 2016–2019
VALUE: EUR 1,502,575



ERLIP improved rural livelihoods through participatory planning and prioritising village needs for small scale infrastructure, such as water supply, access roads, small bridges, community houses etc., as well as support to agricultural livelihood sub-projects (e.g., livestock raising, tea leave processing, cut-flower or groundnut oil production) identified by ERLIP's community-driven development process. ERLIP targeted the poorest members of the communities. The project's outcome included improved household livelihoods and incomes in 29 village tracts (125 villages) in the township.

Land, forests and biodiversity

SERVICES

- + Land administration, registration & tenure security
- + Landscape, catchment & site-level planning
- + Earth observation tools
- + Institutional development
- + Land policy & legislation
- + Conflict resolution
- + Participatory & multipurpose forestry management
- + Prevention of erosion, water & nutrient loss
- + Creation of value chains for forest products
- + Forestry information systems
- + Biodiversity conservation

NIRAS is committed to protecting and promoting the sustainable use of terrestrial ecosystems. We view people as the central element of the landscape and support local communities, policy reform, and the implementation of sustainable land management to help protect the landscape-based livelihoods on which so many depend.

Our forestry services aim to balance environmental, social, and economic benefits from the use of land. We pursue integrated, participatory, and multipurpose forest management as an essential instrument in climate change mitigation as well as the reduction of poverty through income generation. Our recipe for improved forest governance calls for comprehensive stakeholder involvement, transparency, and accountability in decision-making.

In addition to reducing conflict and increasing investments in land, land governance projects enhance land productivity, income, and gender equality. Our holistic approach considers the rights of local people as well as a nation's history and economic vision. We support governments in the development of cost-effective land administration systems that meet national objectives and conform to international standards. These systems are adjusted to local conditions and developed within the capabilities of the country's national administration.



Biodiversity Conservation and Management of Protected Areas in ASEAN (BCAMP)

CLIENT: EU
COUNTRY: ASEAN region
DURATION: 2019-2023
VALUE: EUR 1,840,626



BCAMP aims to enhance environmental, social, and economic well-being through better biodiversity conservation, effective management of protected areas, and the reduction of biodiversity loss. Onsite interventions and tools have been rolled out to improve management of protected areas. Biodiversity conservation is being mainstreamed into national development plans and support given to ASEAN Heritage Parks to protect the region's unique habitats and ecosystems. Capacity building focuses on the ASEAN Centre for Biodiversity as a regional mechanism to bolster biodiversity conservation and build regional cooperation.



Elders at a village meeting discussing land boundaries in Riau Province, Indonesia, as part of the Participatory Mapping and Planning Project. In the Participatory Mapping and Planning Project, MCA-Indonesia tasked NIRAS and local partner SEKALA with mapping 82 village boundaries in Riau Province in only 42 weeks between 2017 and 2018. The project team designed a process to enable all local stakeholders to participate in creating a new map of the village boundaries with buy-in from all sides.

FORMIS – a management information system for the forestry sector – enabled relevant agencies in Viet Nam to integrate their data to improve monitoring and communications as well as reduce emissions from deforestation and forest degradation. It also strengthened forest law enforcement, governance, and trade activities. The Viet Nam Forestry Administration (VNFORD) adopted FORMIS's resource database and monitoring system for official use. Funded by the Finnish Ministry for Foreign Affairs, FORMIS ran across two phases from 2009 until 2018 at a value of €9.7M



Green Economic Growth (GEG) Programme

CLIENTS: FCDO
COUNTRY: Papua provinces, Indonesia
DURATION: 2017-2022
VALUE: EUR 12,360,679



GEG helps Papuan smallholder farmers and micro small medium enterprises increase the productivity and quality of their commodities or products through technical assistance, training and appropriate technology and tools. The programme engages with enterprises and entrepreneurs who have a clear business concept and some early working capital and stays with them on the journey to becoming a fully sustainable and bankable enterprise which - if it desired - could obtain a loan from the bank.



SERVICES

- + EIAs & environmental assessments
- + Environmental information systems
- + Green growth / green economy
- + Waste management & solid waste
- + Climate change adaptation in the water, land, agriculture & forestry sectors
- + Climate resilient infrastructure
- + Climate strategies, policies & plans
- + Disaster risk management
- + Training & capacity building, including education, networking & awareness building

The state of the environment and climate change is a serious concern for society today. The unsustainable use of natural resources and impacts of human activities on the environment are well documented. It is widely recognised that new approaches and solutions are needed if we are to adapt to climate change. The balance between the environment and nature, on the one hand, and the need for development and growth, on the other, presents a serious challenge but also offers new opportunities.

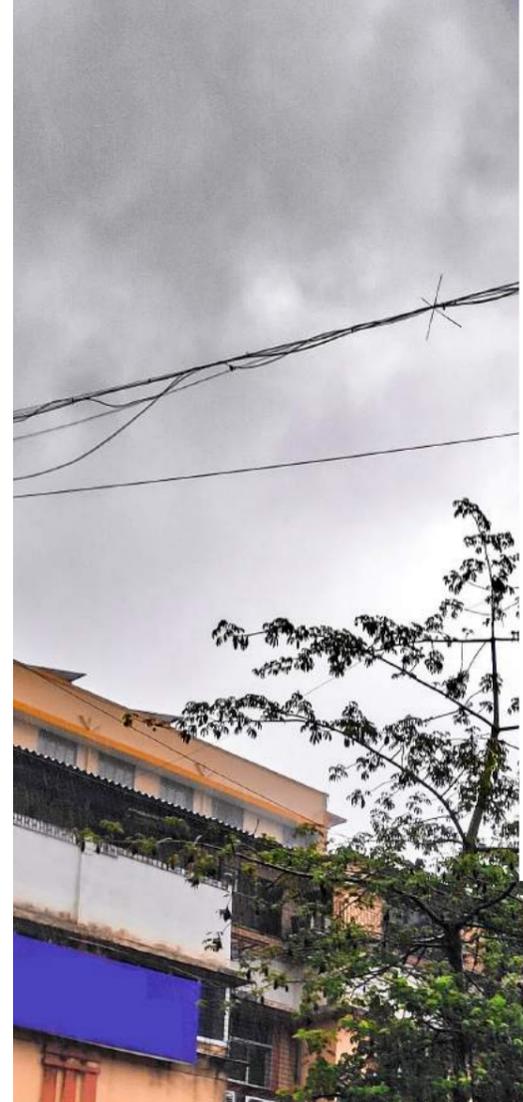
NIRAS recognises that people, livelihoods, and ecosystems must all be taken into consideration for the successful management of natural resources and the environment. We advocate a holistic and interdisciplinary approach that seeks to maximise synergies between economic, social, and environmental objectives while minimising trade-offs. Together with the key stakeholders, we analyse the often complex situations with dedication. We emphasise socially acceptable solutions and the analysis of opportunities and alternatives.

Integrated Urban Environmental Management in Tonle Sap Basin

CLIENT: ADB
COUNTRY: Cambodia
DURATION: 2016-2022
VALUE: EUR 590,737



Focused on improving climate change resilience, particularly flood and erosion protection, and urban services in Kampong Chhnang and Pursat municipalities, the project worked with urban area environmental improvements. It strengthened community mobilisation and sector coordination and capacity for project implementation, as well as operation and maintenance of urban services. The project included innovative features such as integrated urban environmental management and strategies, significant climate resilience infrastructure investments, and pilot demonstration on integrated solid waste management.



The ADB contracted NIRAS to develop a proposal for Climate Adaptive Integrated Flood Risk Management Project in Viet Nam from 2020-2022. NIRAS is also developing project proposals for obtaining co-financing from other finance sources such as Green Climate Finance. The project supports the Vietnamese Government's implementation of the flood risk management plans for the Red-Thai Binh River and the Ma River to ensure systems are operational and well maintained.

In examining risk related to climate change, the the Climate Vulnerability and Adaptation Assessment of Cambodian Secondary Cities (CVAA) project made recommendations for effective adaptation strategies, resilient infrastructure and inclusive urban development. CVAA assessed the nature and spatial location of climate hazards, vulnerabilities, and risks given current climate change projections and adaptive capacities. The four cities were selected as they are located on major rivers and highly susceptible to increased flood risks, leading to an urgent need for investment to improve resilience. The resulting study informed the identification, prioritisation and design of proposed investments in the cities of Battambang, Kampot, Kratie and Chhlong.



Second Coastal Towns Environmental Infrastructure Project



CLIENT: ADB
COUNTRY: Bangladesh
DURATION: 2021-2022
VALUE: EUR 786,216

The project aims to strengthen climate resilience and disaster preparedness in eight vulnerable coastal pourashavas (secondary towns) of Bangladesh. There are two key outputs: (1) improved climate-resilient municipal infrastructures - such as drainage, water supply, sanitation, and cyclone shelters - and (2) strengthened institutional capacity, governance, and awareness on urban planning and service delivery. Non-structural measures to reduce climate and disaster risk include increasing public awareness and community mobilisation.



SERVICES

- + Integrated & participatory urban planning
- + Urban climate change adaptation
- + Institutional strengthening & public management
- + Environmental management
- + Competitiveness & local economic development
- + Urban-rural linkages
- + GIS & spatial planning
- + Urban design, public space & housing development

Well-functioning and productive cities are fundamental to achieve inclusive economic growth and a strong social fabric. Urban centres keep attracting the young and mobile. With more than half the world's population living in cities, we must urgently improve urban infrastructure, public service provision, good governance, and overall liveability in line with the New Urban Agenda.

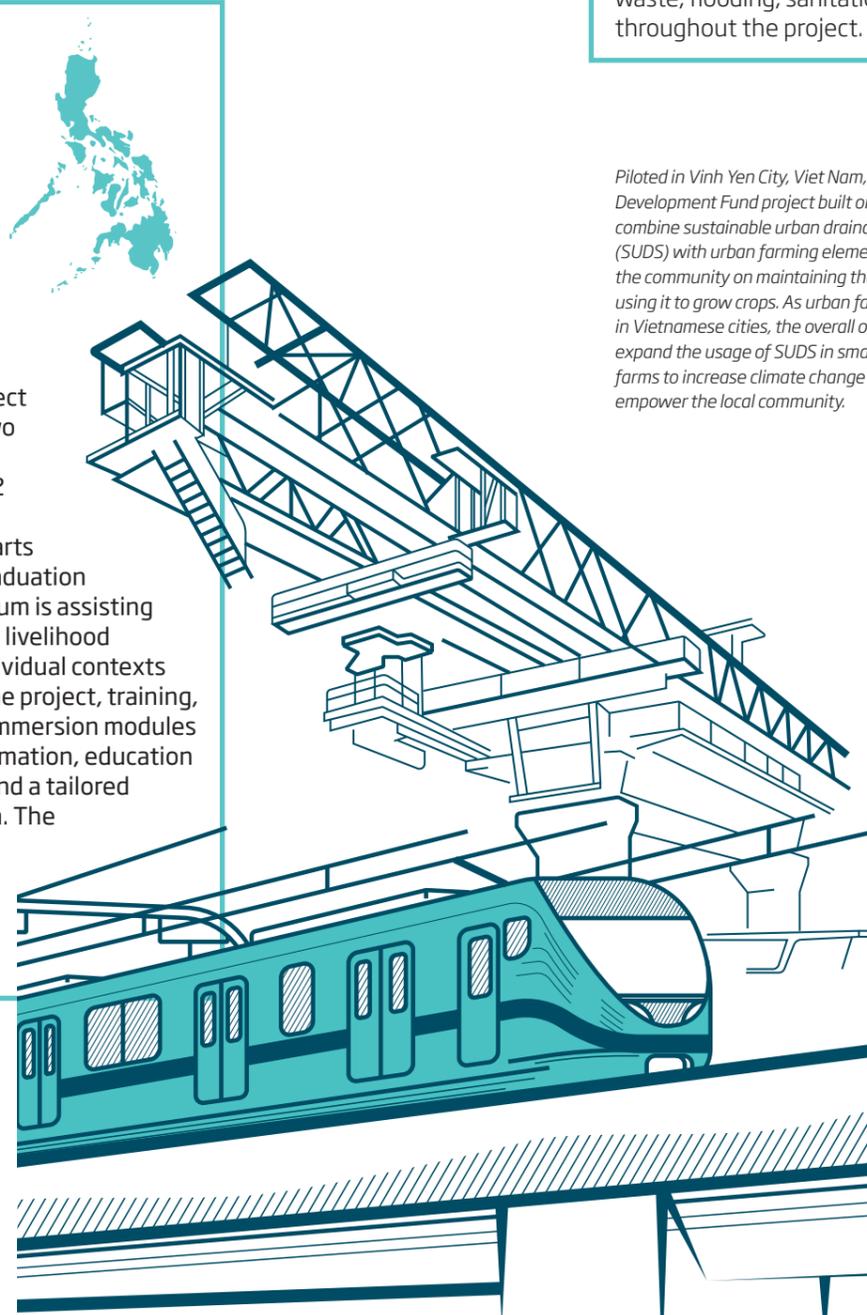
NIRAS's approach to working in urban settings is rooted in the interdisciplinary nature of the challenges impeding cities from becoming productive, resilient, and liveable settlements. Our work is often a combination of technical fields such as private sector development, competitiveness and job creation, gender equity and inclusiveness, institutional capacity-building, urban water resource management, climate change adaptation, and energy efficiency. When addressed in tandem, these are some of the core areas of intervention for achieving a paradigm shift in response to rapid urbanisation.

NIRAS draws on its extensive know-how and experience and tailors international best practices and lessons learned to the context of each city in which we engage. We always strive to embed our projects in structures with strong local ownership and take pride in engaging our country offices as well as local expertise in Africa, Asia, Europe, and Latin America when implementing assignments.

Strengthening the Transition of Vulnerable Communities Affected by the Malolos-Clark Railway Project

CLIENT: ADB and JICA
COUNTRY: Philippines
DURATION: 2020-2022
VALUE: EUR 1,656,715

The Malolos-Clark Railway Project supports the construction of two sections of the North-South Commuter Railway totaling 53.2 kms. Construction on this scale inevitably requires resettling parts of the population. Using the Graduation Approach, a NIRAS-led consortium is assisting affected households to develop livelihood programmes based on their individual contexts and productive assets. Under the project, training, coaching, mentoring and field immersion modules were developed as well as information, education and communication materials and a tailored monitoring and learning system. The best practices and lessons learned from employing this model will serve to improve future policies governing resettlement.



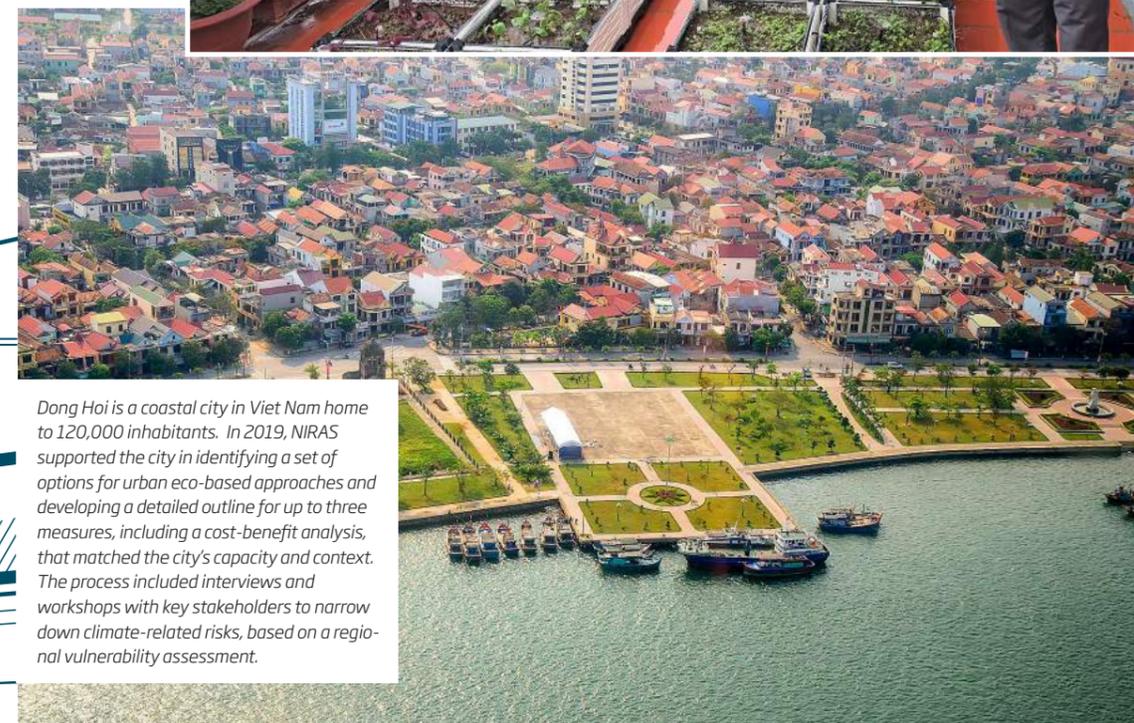
Community-Based Solid Waste Management Project

CLIENT: ADB
COUNTRY: Myanmar
DURATION: 2018-2022
VALUE: EUR 1,004,274

As part of a broader project to upgrade Mandalay's water and sanitation services, NIRAS piloted community-based solid waste management initiatives, working directly with communities and "agents of change" on better local infrastructure and services. Based on an extensive stakeholder engagement exercise, the team developed Ward Resilience Committees and Ward Resilience Plans for four selected townships. We also assessed options for recycling, composting, and sludge management and tested the feasibility of a Ward Resilience Fund to mobilise resources. Awareness-raising on the interlinkages between climate change, solid waste, flooding, sanitation, and health were conducted throughout the project.



Piloted in Vinh Yen City, Viet Nam, this Nordic Development Fund project built on the potential to combine sustainable urban drainage systems (SUDS) with urban farming elements and educated the community on maintaining the system while using it to grow crops. As urban farming is popular in Vietnamese cities, the overall objective was to expand the usage of SUDS in small-scale urban farms to increase climate change resilience and empower the local community.



Dong Hoi is a coastal city in Viet Nam home to 120,000 inhabitants. In 2019, NIRAS supported the city in identifying a set of options for urban eco-based approaches and developing a detailed outline for up to three measures, including a cost-benefit analysis, that matched the city's capacity and context. The process included interviews and workshops with key stakeholders to narrow down climate-related risks, based on a regional vulnerability assessment.

SERVICES

- + Ports & harbours
- + Roads & bridges
- + Railways
- + Airports
- + Climate-resilient & sustainable urban environment
- + Energy
- + Coastal management & stabilisation
- + Flood protection



Positioning Sri Lanka as the Preferred Port and Shipping Destination in Asia



CLIENT: ADB through MTBS
COUNTRY: Sri Lanka
DURATION: 2016–2018
VALUE: USD 125,000

Maritime transport is essential in Sri Lanka, and the island nation plays a substantial role as a regional transport hub due to its strategic location. In order to maintain its competitive edge, Sri Lanka continuously invests in strengthening the capacity of its ports. NIRAS worked with the government to develop a national master plan for the port sector, including the restructuring of the Sri Lanka Ports Authority. We delivered development plans for the ports of Colombo and Trincomalee, as well as concept designs and cost estimates for expansion proposals (passenger terminal and South and North Ports in Colombo and oil and dry bulk terminals in Trincomalee).

People are constantly on the move, and goods are transported daily between local communities and cities, as well as across national borders. This could not take place without efficient transport infrastructure. With more than half the world's population living in cities, we face an urgent need to improve infrastructure and public service provision.

NIRAS responds to our clients' infrastructure needs by creating new sustainable solutions and upgrading existing ones. Our work is often a combination of multiple technical fields ranging from planning to construction. Our services cover the full project cycle, from the preparation of master plans and technical and financial analysis, through design and tendering, to supervision, commissioning, operation and maintenance.

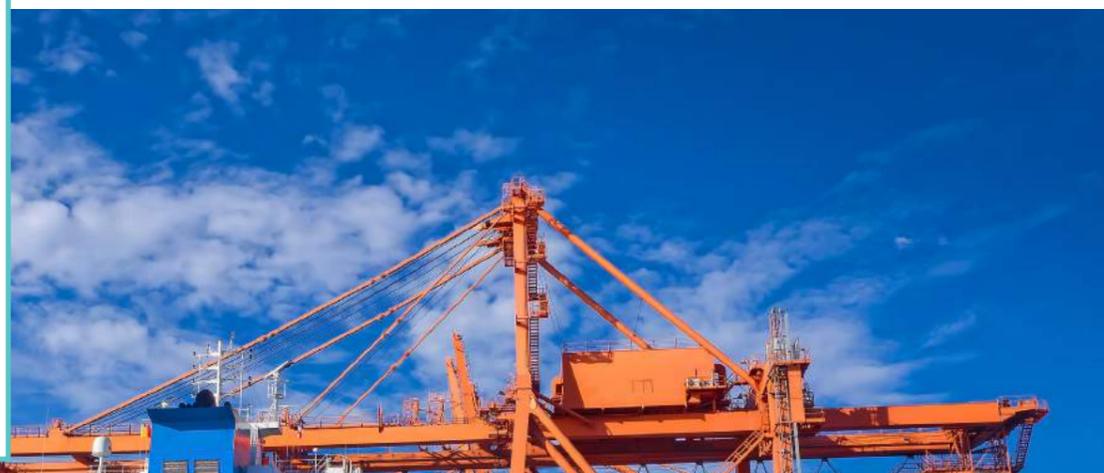
In Asia-Pacific, we have significant experience in planning and engineering for maritime infrastructure (ports, jetties and terminals), land transport infrastructure (roads, and rail and light rail) as well as large and complex coastal projects. For the early phases of projects, NIRAS has performed port specific master plans as well as nationwide port master plans, and we have planned and designed container and general cargo terminals, ferry terminals, liquid bulk terminals as well as huge logistics hubs.

International Port Gulhifahlu, The Maldives



CLIENT: Maldives Government
COUNTRY: Maldives
DURATION: 2019–2022
VALUE: USD 1,600,000

For three decades, NIRAS has been involved as consultants in the maritime sector in the Maldives. Given the nature of the archipelago – 250 inhabited islands, over a stretch of 1,000 km – the focus has been on relatively small general cargo terminals and ferry ports for passengers and goods. In 2019 however the scene changed, and NIRAS was assigned to prepare port master plan, feasibility study and design for a major new international port in Male. The International Port in Gulhifahlu features about 100 ha reclamation for the new port area, 1200 m berths for an international container terminal, domestic terminals as well as all ancillary infrastructure and handling equipment. It is an important element in an ambitious plan for the Greater Male Region, being implemented by the Government of the Maldives.



Tanjung Manis Fishing Harbour Complex, Sarawak



CLIENT: Department of Fisheries /Hock Seng Lee Berhad (HSL)
COUNTRY: Malaysia
DURATION: 2007–2008
VALUE: USD 750,000

Modeled after its counterpart in Skagen, Denmark, the Tanjung Manis Deep Sea Fishing Port is today one of the most modern and technologically advanced fishing ports in the region. The port cost RM332 million to build and sits on 35 hectares of land, with a quay that has a total length of 600 m. Together with the Department of Fisheries, NIRAS developed the master plan, which outlines a highly efficient infrastructure catering for the storage, processing and subsequent marketing of fish. The master plan was developed with a goal to have a total landing of 25,000 tonnes of fish per annum. NIRAS was novated to the Malaysian contractor Hock Seng Lee and developed the design in cooperation with their engineers.



SERVICES

- + Rural & urban water supply
- + Wastewater management
- + Integrated water resource management
- + Training/capacity-building
- + Climate change adaptation & disaster risk management
- + River basin management
- + Sanitation & hygiene
- + Sector reform
- + Coastal management



In the World Bank's Ayeyarwady Integrated River Basin Management (AIRBM) project, NIRAS developed a detailed technical design for modernised Hydromet Observation and Information Systems to improve the quality of weather, climate and hydrological information and services in Myanmar.

WAT4CAM Component 4: Promotion of a Sustainable Agricultural Transition

CLIENT: AFD & EU
COUNTRY: Cambodia
DURATION: 2020-2024
VALUE: USD 2,925,725



Cambodia has substantial hydraulic and irrigation systems that were built over decades to support the country's enormous agricultural population. However, many of these have not been maintained or upgraded since they were built during the 1970s and 1990s. The Water Resources Management and Agro-ecological Transition for Cambodia (WAT4CAM) programme has as its first objective the rehabilitation of up to 13 medium-sized irrigation schemes and up to 40 preks (small irrigation systems mostly built during the French Protectorate) in five provinces in the north of the country. Seizing on the opportunity afforded by the infrastructure investments, WAT4CAM will go beyond construction and work to realise an overall transformation in how to sustainably manage water resources as a way to provide farmers with secure access to water and improve their resilience to climate change. The goal is to intensify and diversify sustainable agriculture and use the modernisation of irrigation infrastructures to disseminate climate-smart practices (that increase fertility, yields and quality), encourage value-chain structuration and agro-diversification, and improve carbon capture and storage.



Water is essential to human life. Access to safe and affordable drinking water is a crucial right, vital for economic development, social well-being, and the reduction of poverty. Due to the increasing occurrence of water stress and scarcity, increasing variations and uncertainties in weather patterns, deterioration in water quality, and the mismanagement of water, finding and implementing innovative technologies and solutions geared toward the future becomes a matter of urgency.

At NIRAS, we take an integrated and holistic approach to water management, access, and final domestic or income-generating use. Our expertise covers all aspects of planning, design, and implementation of water-related projects in a variety of fields and our team of specialists comprises engineers, biologists, environmentalists, geologists, socio-economists, and financial and institutional professionals.

Integrated water resource management takes full recognition of the multi-disciplinary tasks involved, and our consulting and advisory services cover the entire range of disciplines, including transboundary water resource management. Adaptation to extreme weather events and unpredictability also require technical expertise and state-of-the-art technologies specific to the environment in which they are to be applied. Projects must be administered wisely and be of economic benefit to society.

Mindanao Irrigation Development Project (Phase 1)

CLIENT: ADB
COUNTRY: Philippines
DURATION: 2020-2022
VALUE: USD568,132



The Mindanao Irrigation Development Project aims to assist the Government of the Philippines to increase productivity and climate resilience of irrigated agriculture in Mindanao by (i) strengthening irrigation planning, design, and management capacities; (ii) developing efficient and climate resilient irrigation systems; and (iii) adopting climate resilient irrigated farming practices. The team are identifying, analysing and recommending a comprehensive program of activities and works to achieve the project outputs. They are conducting due diligence (i.e. technical, economic, financial, environmental, and social) and assisting the Government in preparing documentation required during its National Economic Development Authority Investment Coordination Committee approval process as well as drafting the ADB Report and Recommendation of the President and related documents.



In Malaysia and Thailand, NIRAS is working on groundwater and water supply modelling projects that include elements of tackling non-revenue water.



Agricultural Income Improvement Project (AIIP) in Myanmar

CLIENT: JICA
COUNTRY: Myanmar
DURATION: 2019-2026
VALUE: USD 1,649,680



Aiming to improve irrigation infrastructures, train a new skilled workforce, and contribute to greater mechanisation in the agricultural sector, the AIIP project will irrigate total 493,000 acres of farm lands and benefit about 67,000 farm households in Myanmar. AIIP will also repair and construct hundreds of kilometres of roads and 42 bridges to provide a more stable infrastructural backbone to the rural region, facilitate access to markets, and connect remote areas to Myanmar's cities. To strengthen the capacity of both public and private sector, the programme will build and staff several agriculture extension centres to train local community members in agricultural techniques and technology.

SERVICES

- + Renewable energy policy, planning & technologies
- + Energy efficiency in buildings & industrial environments
- + Institutional development & capacity building
- + Energy fund management & innovative finance schemes
- + Inclusive access to sustainable energy
- + Off-grid supply
- + Regulatory reform
- + Environmental assessment and impact monitoring

As a pioneer in clean energy in Denmark, NIRAS has been providing advisory services for sustainable energy solutions to private and public clients worldwide since the 1980s. Today, we offer expert advice in the areas of policy, finance, regulation, institutional development, and fund management.

In recent years, governments in more than 20 countries have turned to NIRAS for support in fostering the development of sustainable energy. Our capacity-building expertise enhances the ability of local government institutions to keep up with new actors and developments in the energy sector while ensuring good governance.

To reach the climate goals, large investments are needed. NIRAS is at the forefront in developing innovative instruments to leverage private investment while minimising public support. We develop country-specific renewable energy (RE) support schemes and energy fund management programmes to attract investors to Asian markets. While Asia-Pacific's "island geography" brings several challenges, it offers even more opportunities for RE technology. We support the use of decentralised energy systems to maximise economic, environmental, and social benefits. Nevertheless, energy efficiency (EE) remains the jewel in the toolkit of energy planners as capacity can be freed at low cost and the potential of EE still remains untapped. EE measures allow for a much better cost-to-benefit ratio than new RE installations in mainland and island economies.

Engineering Services for Taiwan Power Company Offshore Wind Farm Phase 1

CLIENT: Taiwan Power Company and Sinotech Engineering
COUNTRY: Taiwan
DURATION: 2016-2022
VALUE: USD 1,500,000

NIRAS provided owner's engineering services to phase I of Taiwan Power Company (Taipower)'s Offshore Wind Farm (109 MW) from its initiation phase through to the EPC phase and wind farm completion. The offshore windfarm has been in operation since the end of 2021 and is one of the first commercial scale offshore wind farm in operation in Taiwan. NIRAS provided technical review and assurance of EPCI contractor's documentation, covering the design, fabrication, construction, installation and commissioning phase. NIRAS also provided training to the client and technical supervision for activities including offshore foundation installation, offshore cable installation, offshore WTG installation and commissioning.



Supporting Sustainable and Efficient Energy Policies and Investments - Indonesia

CLIENT: ADB
COUNTRY: Indonesia
DURATION: 2020-2022
VALUE: USD 1,155,062



The objective of the project is to support Indonesia with improved policy measures, capacity, and awareness for sustainable and efficient energy policies, and scaling up investments in renewable energy generation. NIRAS's technical assistance supports the Indonesian government as well as ADB in the preparation of three projects and programmes for sustainable and efficient energy development, including loan preparation for financing the implementation of these projects in Indonesia. These flagship projects include: (1) Sustainable and Inclusive Energy Programme - policy-based loan, (2) Renewable Energy Development (investment) Project, and (3) Sustainable and Efficient Sector Development Programme linking policy reform with capital investments.



Energy and Environment Partnership (EEP) in the Mekong Region

CLIENT: MFA Finland
COUNTRY: Mekong region
DURATION: 2009-2019
VALUE: EUR 10,000,000 (fund)



EEP was a two-phase development programme and catalytic fund to improve livelihoods and reduce greenhouse gas emissions by increasing access to renewable energy sources across frontier markets in Cambodia, Lao PDR, Myanmar, Thailand, and Viet Nam. The programme comprised a TA Facility providing matching grants to public and private sector actors to catalyse private investment and transform the renewable energy sector, and capacity building of MSMEs to develop new renewable energy business cases through a diverse network of TA service providers. The EEP facility mobilised and disbursed a total of €28.8 million in funding, of which €18.5 million was private investments. In total, 223 MSMEs and over 250,000 individuals benefited from the programme.



Under the Viet Nam Energy Efficiency (EE) for Industrial Enterprises Project, firms can apply for EE investment lending, with IBRD contributing US\$100 million and 20% co-financing from partner financing institutions and 20% own equity financing. NIRAS provided technical support to the finance institutions and industrial enterprises for development and preparation of due diligence reports to ensure the investment lending had maximum impact.



NIRAS has been awarded a multimillion USD contract to conduct an international standard Environmental and Social Impact Assessment (ESIA) for the 3.5GW La Gan offshore wind farm in the Binh Thuan province of Vietnam. Our role is to ensure this project's environmental and community impact is minimized, and ultimately, that clean, renewable and reliable electricity is delivered to the people of Binh Thuan.

SERVICES

- + Democratic governance & rule of law
- + Gender mainstreaming & budgeting
- + Support to civil society & media
- + Institutional and organisational strengthening
- + Decentralisation, local authorities
- + Conflict prevention, reconciliation, peace & stabilisation
- + Migration



Although its focus is on increasing agricultural productivity through improved access and use of water, the ADB Panj-Amu River Basin Project's overarching objective is to support efforts to increase per-capita income and reduce poverty among rural and pastoral communities. In increasing annual farm incomes by up to 55% over 55,000 households and creating approximately 11,000 full-time rural jobs per year, the project will improve food security and increase exports of high-value products.

The promotion of gender equality, human rights, and peaceful and inclusive societies for sustainable development is at the very core of NIRAS's work. We understand that if we don't build societies that are open to everyone; offer just treatment to citizens; and provide effective, accountable and participatory governing bodies, social peace may not last, violence can (re)surface, and most development achievements will be lost.

We have a long track record of supporting civil society and promoting dialogue with government authorities to enable community participation in decision-making and more transparent, accountable governance. NIRAS strengthens democratic institutions, the rule of law, and the integration of gender perspectives through numerous initiatives including capacity development, effective M&E systems, and gender mainstreaming and budgeting. In managing a response roster, we actively work towards security, peace, and stability in states dealing with conflict and fragility. Through several global training programmes, we build capacities of stakeholders in affected countries and regions with regards to human rights, gender, good governance, peace, and security.

Using methods such as the human rights-based approach and integrating a gender perspective throughout the project cycle in every sector – optimising outcomes for all beneficiaries – further enables us to base our work on international human rights standards and make our own actions accountable.



Qualitative Panel Services on Gender Norms

CLIENT: DFAT
LOCATION: Indonesia, Philippines, Viet Nam
DURATION: 2020-2022
VALUE: EUR 94,919



As part of the Investing in Women programme under the Australian Government and funded by DFAT's Gender Equality Branch, NIRAS was contracted to manage the Qualitative Panel Services on Gender Norms. We wrote the "Insights Panel - Gender Equality Norms among Urban Millennials Midline Report" that investigated four core gender norms across Indonesia, the Philippines, and Viet Nam, namely childcare, breadwinning, job segregation, and leadership. The report was based on in-depth interviews and focus group discussions from 85 panellists. It explores the interplay between childcare norms, breadwinning, and social expectations among urban millennials. And it compares differences in views among progressives and traditionalists and between males and females.

International Training Programme (ITP) on Media Self-Regulation in a Democratic Framework

CLIENT: Sida
LOCATION: Global. Asia cohort: Cambodia, Bangladesh, Viet Nam, Philippines, Lao PDR, Myanmar
DURATION: 2018-2022
VALUE: EUR 2,700,000



ITP Media strengthens participants' and their organisations' capacities to contribute to functional and up-to-date systems and structures for media self-regulation in coordination with organisational and legal structures in each participating country. NIRAS organises this ITP in cooperation with International Media Support, Fojo Media Institute/Linnaeus University, and Global Reporting Sweden AB. To date more than 400 participants have enrolled from 21 countries.



The Humanitarian Assistance and Resilience Programme (HARP) Facility carries out humanitarian programming on the Thai-Myanmar border. HARP supports immediate relief and early recovery interventions, improves emergency preparedness, helps to reduce future humanitarian needs and builds resilience of people in protracted crises. As Evaluation Manager, NIRAS provides an ongoing and independent guidance on and evaluation of HARP.



NIRAS conducted a mid-term evaluation of the EU Empowerment Programme in Viet Nam (EU JULE) which aims to strengthen rule of law and increase access to justice for women, children and disadvantaged groups. The evaluator paid specific attention to the mainstreaming of gender, environment, digitalisation and climate change; whether the relevant SDGs and their interlinkages were identified; the principle of Leave No-One Behind and the rights-based approach methodology.

Education, skills & employment

SERVICES

- + Development of conducive policy frameworks
- + Technical, vocational & educational training
- + Development of curricula & training programmes
- + Training of trainers
- + Labour market information systems
- + Private sector development & engagement
- + Set up & management of skills development funds
- + Support to national employment service centres
- + International training programmes (ITPs)



NIRAS provided Technical Assistance for the Competence-Based Soft Skills in School Education programme in Nepal which aimed to improve the quality of education integrating soft skills - personal, cooperation, thinking, innovation and business skills - into teaching.



The Sida Help Desk on Education, Skills Development and Lifelong Learning in Afghanistan was established to assist in providing short-term counselling and expert advice on a variety of areas such as advocacy, appraisal, indicators, and aid modalities and methodologies and their application in skills development, vocational education and training and the education sector in Afghanistan.

Skills development and employment promotion play a key role in achieving countries' development aspirations. Only real jobs offer young and mobile people a true perspective. Applying a holistic approach, NIRAS works to strengthen governance structures that link education and training with the labour market. We promote a lifelong learning perspective and consider skills development within the entire education system, be it school-based, in-company, cooperative or informal in nature. In supporting the development of conducive policy frameworks, we assist governments in drafting regulations to ensure that initiatives are based on a comprehensive strategy that align with national socio-economic goals.

Inclusive and equitable skills development increases economic productivity and addresses inequality. Therefore our goal is to improve the quality of existing education and training systems. We do this by working closely with national counterparts to strengthen local structures and institutions in the context of existing socio-economic conditions. We support the development of integrated labour market systems and provide guidance on better linking human resources with current and expected skills needs. NIRAS also actively engages the private sector and target especially small and medium enterprises (SMEs) as an effective and efficient way to generate employment opportunities in development contexts.

EdTech Solutions for Last Mile Schools in the COVID-19 pandemic

CLIENT: ADB
COUNTRY: Philippines
DURATION: 2021-2023
VALUE: USD 1,276,601



This project aims to build on international experience on EdTech, test the approach in a disadvantaged, remote setting, and identify best practices and lessons learned during and post COVID-19. Twenty last mile schools receive support in implementing EdTech solutions that ensure students have safe, secure and consistent access to facilities and resources for distance learning. Working closely with the ADB and government counterparts, the NIRAS team is developing content for blended learning in high school math, English and science, pilot low-cost solutions including LAN sets and 3000 tablets for students. We are also training around 200 teachers, school leaders, and other relevant staff.



Advanced training and capacity building for organisational change

CLIENT: Sida
LOCATION: Global. Asia cohort: Cambodia, Bangladesh, Lao PDR, Myanmar and Nepal
DURATION: 2016-2022
VALUE: EUR 7,200,000



Continuous capacity building is vital for securing sustainable development. NIRAS specialises in preparing and conducting international training programmes (ITPs), seminars, and study tours on a variety of topics including sustainable urban water and sanitation (SUWAS). Achieving SUWAS services for everyone, everywhere is a key SDG that requires not only political commitment and leadership, but hard work, increased capacity, innovative ways of working and new forms of collaboration between sectors and individuals. NIRAS implemented the advanced SUWAS ITP on behalf of Sida in partnership with WaterAid. The ITP - which contributes to improved planning and implementation of SUWAS where the rights and needs of all citizens are taken into account - offers new knowledge, concrete problem solving, an extended professional network within and across countries, and a toolbox of methods and local support to drive change.



SERVICES

- + Private sector development & entrepreneurship
- + Science, technology & innovation (STI)
- + Inclusive business
- + Fund management & access to finance
- + Investment climate & public-private partnerships
- + Curriculum development
- + Policy analysis & market studies
- + Facilitating innovation linkages

Sustainable development cannot be secured without a sound revenue base, and a vibrant private sector is the engine to achieve this. Without economic perspectives, young people will leave home. Our approach to economic development is designed to benefit both local communities and investors. We provide technical assistance and skills transfers to the public and private sector [e.g., micro-, small and medium-sized enterprises (MSMEs), entrepreneurs, start-ups, farmers, processors, and larger industries] as well as academia. Applying a “Making Markets Work for the Poor” socially inclusive approach, we include elements of business development services, value chain development, market linkage creation, and public-private partnerships (PPPs), without ever compromising on good governance.

Support to MSMEs is vital due to their potential for creating jobs and decent living standards. Our approach builds private- and public-sector capacity as we cover the spectrum from knowledge development via transfer and commercialisation to utilisation. We promote open innovations by linking clients to local and international expertise and facilitating knowledge exchange.

NIRAS also facilitates access to finance via various funding sources and new mechanisms with scalability potential. We do this by strengthening financial intermediaries and promoting customer-centric models.

The Viet Nam-Finland Innovation Partnership Programme (IPP)

CLIENT: Ministry for Foreign Affairs Finland
COUNTRY: Viet Nam
DURATION: 2009–2014 and 2014–2018
VALUE: EUR 11,000,000 (Phase II)



IPP was launched in 2009 to support Viet Nam’s national innovation system as well as the country’s goal of becoming a knowledge economy. NIRAS implemented both phases of the programme. The IPP’s main goal was the creation of an enabling entrepreneurial and innovation ecosystem in Viet Nam that 1) supports the establishment of high-growth, innovative companies; 2) promotes collaboration with foreign partners; and 3) contributes to innovation-led economic development. IPP created +300 jobs through IPP-funded and accelerated start-ups. It laid the foundation for a strong entrepreneurship and innovation ecosystem in Viet Nam and pioneered best practices, which are being replicated by the Government of Viet Nam and other ecosystem developers around the globe.



Sustainable Forest Management to Improve Livelihood of Local Communities

CLIENT: ADB
COUNTRY: Mongolia
DURATION: 2015–2018
VALUE: EUR 1,800,000



The overall intention of this project was to support Mongolia’s policies around forest protection while encouraging private enterprises and forest user groups to get involved in forest management. The project improved the capacity of (governmental) forest management line agencies and strengthened forest product value chains. Most importantly it developed methods and tools and used training and knowledge sharing to enable forest users groups improve their members’ livelihoods while making them more efficient at restoring, managing and conserving the forests for which they are responsible.



Gender-responsive procurement (GRP) is a powerful means to bridge women’s businesses to markets, supporting their viability and growth. NIRAS conducted a regional benchmarking study to assess existing and future opportunities for gender-responsive procurement in Asia-Pacific in both the public and private sectors on behalf of the ADB and UN Women.

SERVICES

- + Advice on achieving operational excellence & sustaining capital
- + Definition and design of production facilities
- + Delivery of production facilities (CAPEX)
- + Sustainability and food safety
- + Food and beverage
- + Pharma and life science
- + Industrial production and packaging
- + Logistics and supply chain

As food and beverage process specialists, we provide expert consultancy across all areas of the investment process, project execution, and strategic production optimisation. Our services cover the full range of decision support, project services, and operations services.

We transform visions and challenges into sustainable solutions – from the first idea through to full operation. Our experts' hands-on experience and specific industry knowledge is key to our successful track record. NIRAS consulting engineers bring in-depth knowledge and expertise directly from process industries, encompassing all aspects of the food and beverage industry, the pharmaceutical and life sciences sector, as well as other process industries with complex utility installations.

NIRAS provides a complete range of services across the industry. In addition to defining, designing, and implementing new facilities and equipment and optimising production, we have profound product and industry knowledge in beverage, dairy, meat, poultry, and fish that covers environmental sustainability and food safety, packaging, as well as management decision support, logistics, and supply chain management.



Developing a Greenfield Brewery in Myanmar for Carlsberg

CLIENT: Carlsberg
COUNTRY: Myanmar
DURATION: 2013–2015

NIRAS helps beer and beverage brand owners improve all areas of investments, project execution, and production optimisation. We have been involved in several brewery projects in Asia-Pacific, including in the People's Republic of China and Sri Lanka. In Myanmar, we managed the establishment of a greenfield brewery for Carlsberg when it decided to enter into a joint venture with a local partner in the town of Bago. In addition to overall project management, NIRAS's services included feasibility studies of land and water services, project execution method, tendering, procurement strategy, and conceptual design. Subsequently, over two years, we supported Carlsberg throughout the procurement, site development, construction, installation, and commissioning phases, and helped ensure that the project lived up to international standards.



Helping a South Korean Dairy Producer Design a State-of-the-Art Facility

CLIENT: Seoul Dairy Cooperative
COUNTRY: South Korea
DURATION: 2017–2018
VALUE: EUR 297,000



Seoul Dairy Cooperative is a major dairy product manufacturer in South Korea. Established more than 35 years ago and one of the world's largest milk-processing plants, the existing facilities in Yang Ju were upgraded to enable production of up to five million 200 ml packs or bottles of milk a day. Based on our expert knowledge of modern, hygienic and efficient dairy productions, NIRAS has delivered the master plan for the state-of-the-art facility. With our many years of experience in designing utilities for the dairy industry, NIRAS made and controlled the mass balance to secure a lean production without any bottlenecks in the various production areas. The master plan also included modern automated production technologies to save manpower and natural resources, reducing energy consumption, and ensuring the highest possible quality level of the approximately 70 different dairy products which Seoul Dairy Cooperative produces.



Using advanced computer modelling, NIRAS worked with Tibet Tiandi Green Beverage Company to develop a masterplan with different expansion scenario options.





N NIRAS office
 ● Locations of projects since 2017

NIRAS offices and representatives in the Asia-Pacific region

Our decentralised structure ensures that we are always close to our projects. With 51 offices in 31 countries worldwide, we maintain strong local ties to clients, experts and organisations in all of our key markets. Building on our motto “We listen, we learn, we deliver”, NIRAS is proud to be a long-term partner in the pursuit of growth and prosperity for the countries in which we work. Our representations are staffed by professionals committed to building partnerships with local service providers and train and recruit local talent beyond the lifespan of individual projects. NIRAS sees this as a contribution to building sustainable and equitable future societies wherever we work. Contact our representatives to see how we can support your needs.



Director Asia-Pacific
 Mr. Antti Inkinen
 E: ain@niras.com



NIRAS Cambodia
 Mr. Andre Ban
 E: abn@niras.com



NIRAS Indonesia
 Mr. David Shirley
 E: davs@niras.com



NIRAS Lao PDR
 Mr. Jonas Noven
 E: jnn@niras.com



NIRAS Nepal
 Mr. Neerajan P. Rajbhandari
 E: nrra@niras.com



NIRAS Taiwan Limited
 Raoul Kubitschek
 E: rak@niras.com



NIRAS Viet Nam (RCEE-NIRAS JSC)
 Mr. Nguyen Tuan Anh
 E: anh.nguyen@rcee.org.vn

Sector-contacts



Offshore Wind NIRAS Taiwan
 Raoul Kubitschek
 E: rak@niras.com



Food & Beverage NIRAS Australia
 Edward Lynch
 E: edly@niras.com



Marine Works Water & Sanitation Food & Beverage
 John Stasig Mørk
 E: jstm@niras.com

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As a signatory to the UN Global Compact and member of the International Federation of Consulting Engineers (FIDIC), NIRAS upholds globally recognised principles of integrity, accountability, and transparency.

