



SEnSOR

Socially and Environmentally Sustainable Oil Palm Research

A proposal to address knowledge gaps in sustainability




Credit: MPOG



SEARRP
South East Asia
Rainforest Research
Programme


A project coordinated by the Royal Society SEARRP

What is the SEnSOR Programme?




The **Socially and Environmentally Sustainable Oil palm Research (SEnSOR)** programme:

an integrated multi-disciplinary research programme designed to fill key knowledge gaps in testing and developing the RSPO's Principles and Criteria for sustainability in oil palm agriculture.



Credit : Cede Prudente



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...developed as a result of a scoping study commissioned by RSPO



Scientific literature review

Expert opinion

Reports and policy papers










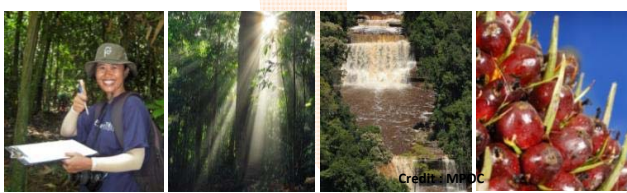
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Why is more scientific research necessary?




- To develop an evidence-based approach for testing the effectiveness of the Principles and Criteria
- To provide baseline information
- To continue to advance the development of sustainable practices.
- To provide independent assessment of RSPO's approach to sustainability.

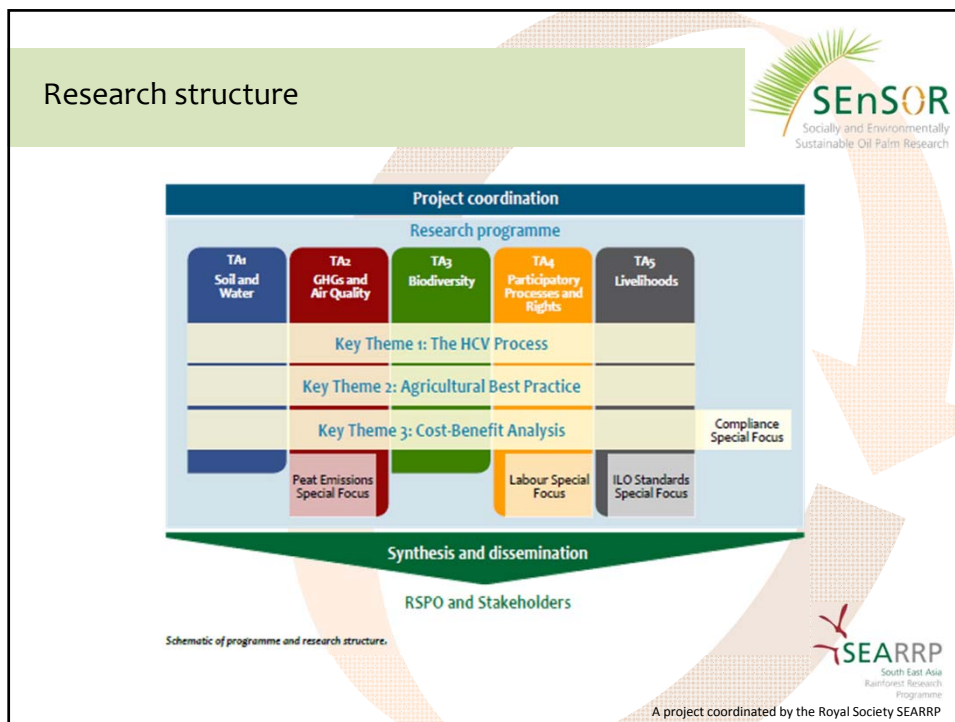
This requires rigorous and independent scientific research, and this research underpins the SEnSOR programme.



Credit: MPOC



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Soil and water

Swansea University
Prifysgol Abertawe


•Coordinated by Prof Rory Walsh

- Impacts and improvements of riparian buffers on sedimentation and chemical runoff
- Effectiveness of existing and new erosion prevention and fertiliser regimes in minimising negative environmental impacts
- Economic costs and benefits of erosion and water quality control for smallholders and large enterprises

Research activities: Surveys, manipulation experiments, laboratory analysis and soil core techniques

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Greenhouse gases and air quality



LANCASTER UNIVERSITY • Coordinated by Prof Nick Hewitt


- Carbon storage capacity in HCVs
- Impacts of management practices on Nitrogen and methane emissions
- Quantifying ozone from plantations and costs to yields, human health and environment

Research activities: above and below canopy measurements using state-of-the-art techniques, computer modelling

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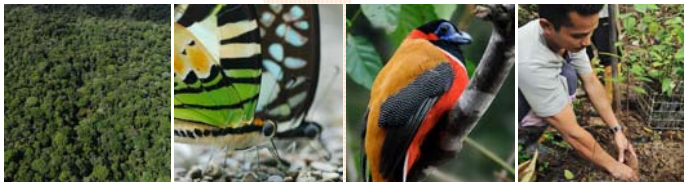

Biodiversity



UNIVERSITY OF LEEDS • Coordinated by Dr Keith Hamer

- How to quantify and improve biodiversity levels in HCV-designed oil palm landscapes
- Impacts of management practices on plantation biodiversity
- Costs and benefits of implementing biodiversity-friendly practices and monitoring

Research activities: biodiversity field surveys, GIS and computer modelling

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Participatory Processes and Rights



• Coordinated by Dr Michiel Kohne

- Ensuring that FPIC and the HCV process are effective in delivering benefits to communities
- Effectiveness of approaches and incentives for community involvement by plantations
- Effectiveness and improvement of mechanisms for labour organisation

Research activities: Inventories of current strategies, multi-stakeholder surveys, in depth case-studies.



Credit: Asril Darussamin, RSPO



Credit: United Plantations



Credit: Cede Prudente



A project coordinated by the Royal Society SEARRP

Livelihoods



• Coordinated by Dr Maja Slingerland and Jolanda van den Berg

- Use of natural resources and ecosystem services by smallholders and effectiveness of HCVs in provision of these
- Adoption of sustainable agricultural practices by smallholders through social organisation
- Impacts of implementing ILO standards for employers, employees and profits

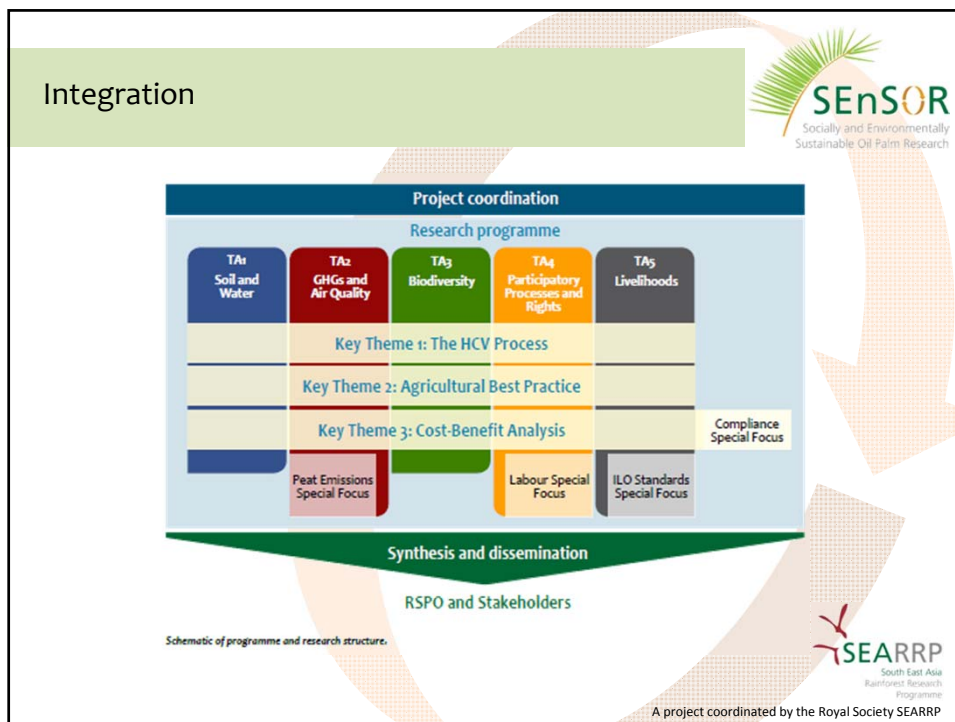
Research activities: participatory education and training approaches, inventory of livelihood strategies, bio-economic modelling




Credit: Dr Asril Darussamin, RSPO




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How will the programme run?





- Coordinated by the Royal Society's SE Asia Rainforest research programme
- Five year programme
- Main sites in Malaysia and Indonesia
- Capitalising on other ongoing research programmes
- Capitalising on infrastructure, expertise and facilities available via the Royal Society SEARRP



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How will findings from the SEnSOR programme help stakeholders?



- Our findings will underpin confidence in the **RSPO** approach to sustainability and provide a credible scientific evidence base.
- Confidence in RSPO Principles and Criteria by markets and the public will encourage demand for RSPO certified palm oil, thereby enhancing **profits**.
- Findings will highlight which practices are effective and deliver alternative recommendations where appropriate. This will help **growers** target resources effectively, and have confidence that compliance with RSPO Principles and Criteria delivers sustainability and produces long term benefits.
- **Palm oil users** and **investors** can be confident that their commitment to RSPO certified palm oil is fulfilling their obligations to sourcing and investing in sustainable products.
- Findings from SEnSOR will enable the RSPO and its members to develop the best methods for ensuring a sustainable palm oil industry, helping to safeguard the **natural environment, local communities and society**.



Credit : Dr Asril Darussamin, RSPO



MPOC



Credit : Dr Asril Darussamin, RSPO



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Facilitating impact of SEnSOR findings through knowledge exchange



We will create maximum impact through effective dissemination of findings...

... so that research outputs can be translated into policy and practice by RSPO, NGOs, stakeholders, and governments.

We will involve funders, stakeholders and RSPO at all stages of programme delivery...

... working together to ensure that the programme's findings are delivered to the most appropriate people and in the most useable way.



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Exit Strategy



A lasting legacy of established processes and collaboration with and between local institutions and organisations for effective implementation of programme findings and recommendations.

This legacy will involve embedding long term monitoring and analysis of standardised information into RSPO Principles and Criteria beyond the timeframe of the SEnSOR programme.

We will build scientific research capacity through local collaborations and graduate studentships in oil palm growing countries and equip key personnel with the knowledge needed to train others into the future.



Credit: Dr Asril Darussamin, RSPO



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Conclusion



SEnSOR will deliver major, evidence-based gains in sustainability...

... and provide a robust, credible foundation for the continued development of RSPO Principles and Criteria.

The economic importance and potential environmental and social impacts of palm oil production necessitate rigorous assessment and testing of RSPO guidelines for sustainability—**this is SEnSOR's mission.**

We are now seeking funding for the implementation of the full programme.



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Thank you for listening



Please come and find us at the SEnSOR exhibition booth



THE UNIVERSITY of York



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