

JOHOR PORT AUTHORITY – COMMUNITY EMPOWERMENT THROUGH SCIENCE AND RESEARCH

1.0 INTRODUCTION

- 1.1 The Johor Port Authority (JPA) is supporting youth capacity-building in Mukim Tanjung Kupang, a stretch of 9 fishing villages around the Port of Tanjung Pelepas (PTP). We empower the youth community through science and environmental education. Local youth are trained from a very young age in natural habitat monitoring, learning about seagrass meadows, mangroves and island habitats in situ. This enables them to better understand, appreciate and take ownership over these ecosystems in their backyards and playgrounds.
- 1.2 The youth are also trained as ecotourism guides, combining local ecological knowledge with science to manage and run unique tours, benefiting the local community. Currently, trained young professionals work fulltime at local environmental NGOs being qualified as Green Badge Nature Guides (certified by Tourism Malaysia), and are recognized as Rakan Pintar (habitat experts) by the Johor Bahru Education Department (PPD).
- 1.3 The youth are now able to independently determine gaps in local habitat information, devise their own research plans and carry out studies to fruition. Well trained youngsters can combine and use the acquired knowledge in advancing ecotourism efforts, as well as becoming trainers themselves and passing on knowledge to more youngsters and the wider community.

2.0 RELEVANT UN SUSTAINABLE DEVELOPMENT GOALS (SDG)

- 2.1 For this study, we have determine that is was under 7 relevant UN SDGs as below :

1.	SDG 1 : No Poverty	<p>The local community around our port area depend on the coastal waters for their livelihoods.</p> <p>Thru this research, Kelab Alami's Nature & Heritage Centre was developed as the tourism and commercial centre for the community to ensure supplementary incomes for local fishermen, women and youth. This helps the community find additional incomes given decreasing incomes from traditional livelihoods. This centre is also the base from which the community will learn new skills that they can use to find jobs other than fishing, which is on a decline. We hope to work with the</p>
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		port to use the site (when it is ready) as a base to promote job opportunities in the port to better support the local community through work and career opportunities, which will help them climb out of their Bottom 40% (B40) status.
2.	SDG 4 : Quality Education	<p>This study provides environmental and sustainability education for local community youth, empowering them with the skills to monitor and care for their habitat, working together with JPA and the port to identify important areas for conservation, as well as the report any potential environmental problem that arise in the area.</p> <p>This research ensured that future generations around our port area have the skills and knowledge to work with JPA and the port to care and protect their environment.</p>
3.	SDG 8 : Decent Work & Economic Growth	<p>This research project promotes sustained inclusive and sustainable economic growth, productive employment and decent work for all – JPA, the port and other companies in this area.</p> <p>On the other hand, this research helps to promote beneficial and sustainable tourism as this area are rich with marine biodiversity, flora and fauna for our educational tourism.</p>
4.	SDG 10 : Reduce Inequalities	<p>The local communities especially fisherman, the children and youth in the village have the proper information and knowledge on the importance of Marine Habitats, Flora and Fauna in surrounding area.</p> <p>This research helped them to develop their skill in on research plan and carry out the study. They learn to be confident, public speaking, English language learning and communication.</p>
5.	SDG 14 : Life Below Water	This research project provided funding for the local community to document and research their marine and coastal areas, with support of marine scientist, so that we have credible data related to the marine biodiversity

		<p>in our port area and a scientific baseline of the flora and fauna that needs to be protected.</p> <p>In this way, Johor Port Authority (JPA), the port and the community work together to mitigate any problems that may arise from port expansion work, as well as find a way to ensure that development and operations are sustainable.</p>
6.	SDG 15 : Life On Land	<p>This research project also enabled local youth to map the coastal mangroves, especially those within the port area so that JPA and the port can use the information to identify areas that are vital to conservation including endangered and endemic species.</p> <p>We now know how many mangrove species we have, as well as the fauna that depend on it. It recognises that true sustainability around our port zones have to be holistic and include areas on land, to the coasts, to sea – the habitats cannot be studied or protected silos.</p> <p>Hence these many facets of our work are interconnected and important. We also included in this programme mangrove replanting, as well waste collection for immediate repair and preservation of the area and are in conversations between port and community for a long – term waste recycling and reuse project on our land.</p>
7.	SDG 17 : Partnership For The Goals	<p>This research was funded by Johor Port Authority (JPA) to Kelab Alami. The funding has helped Kelab Alami achieve our community capacity building and research objectives and have paved the way for many positive future endeavours.</p> <p>Besides Kelab Alami, we engaged and have the input from Port of Tanjung Pelepas (PTP) and researchers from Universiti Malaya (UM). The collaboration and partnership of these organisations was not a consultancy appointment for research output, but was an effective and impactful contribution to the local community for capacity-building and knowledge gathering creation.</p>

3.0 SUMMARY OF RESEARCH OUTCOMES ON COMMUNITY CAPACITY BUILDING

- 3.1 The primary purpose of the project was to capacity building the youth of Kelab Alami in citizen science research and project management. This aspect of the project was overwhelmingly successful. 10 Kelab Alami youth were trained in not only scientific study, data documentation and processing principles, but also in project initiation and management.
- 3.2 In situ training and initial facilitation, research formulation and testing was conducted by Dr. Serina Rahman, with additional engagement and input from several researchers from University Malaya. It successfully :
- i. Train Kelab Alami youth in basic habitat science and monitoring
 - ii. Enable the youth to ask scientific questions with regards to information not yet known about the habitats
 - iii. Facilitate the youths' development of a research study (from hypothesis to methodology to data collection, processing and visualization.
 - iv. Allow the youths to test their hypotheses and methodologies in the field, then return to discuss their success or failures, amend and revise their research plans.
 - v. Allow the youths to meet with scientific advisors in University Malaya to review their study methodology, initial data collection and reviews, as well as learn GPS use and basic GIS tools.
 - vi. Return to the field to continue and implement their study to completion.
 - vii. Process the data, with online input from scientist – advisors in Kuala Lumpur
 - viii. Do presentation to JPA, join related exhibition and begin to write up content as reports and paper.
- 3.3 The youth are now able to independently determine gaps in local habitat information, devise their own research plans and carry a study to fruition. While they have had more than a decade of environmental education, and benefited from their own local ecological knowledge, the scientific structure

that they gained from this process enabled them to combine the knowledge they had into unique holistic and new information that can be used in their ecotourism efforts, as well as in their environmental education programmes for other youth and the wider community.

4.0 RELEVANT PICTURES OF COMMUNITY BUILDING







Haikal sedang mengajar 9 orang budak kecil cara memerang bergerak dari 1 arah ke arah yang lain



Kimi menunjukkan video memerang bermain dan bagaimana memerang makan didalam air.





Prepared By :

Kamaruzaman Bin Haji Munasir

General Manager

Johor Port Authority, Malaysia