

Pulau Pasoso MPA Support Programme

(April 2004-March 2005)

Proposal Submitted to

ICRI Small Grants Scheme

By

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A. Background

Proposed Site:	Pulau Pasoso MPA
Budget:	GBP 21,050 (Flexible)
Site designation:	Suaka Marga Satwa (SKGubernur No.188.44/3932/DISHUN/89).
Site Location:	Balaesang District, Donggala Regency, Central Sulawesi, Indonesia
Site Area:	Pasoso Island (49Ha) and surrounding shallow waters

A1. Site Status¹:

Pulau Pasoso was declared as a protected area with Suaka Marga Satwa (Game Reserve) status in 1989, based mainly on the nesting Green Turtle (*Chelonia mydas*) and megapode populations. The first coral reef survey was carried out by local NGO Yayasan Adi Citra Lestari (YACL) in 2000 as part of UNEP EAS/RCU Survey/Monitoring programme and WRI/ICLARM Reefs at Risk SE Asia. Other rare or endangered species found in the MPA and surrounding area include Giant Clams, Dugong, Hawksbill turtle, Napoleon Wrasse, Coconut Crab, Dolphins and Sulawesi endemic Sulphur Crested Cockatoo. Pulau Pasoso may host grouper spawning site(s). The island is an important foul-weather shelter for small vessels and a prime fishing ground for both nearby villagers and fishermen from further afield.

This survey and subsequent monitoring using GCRMN methods and involving local communities (supported by UNEP EAS/RCU, The David & Lucille Packard Foundation and NOAA) revealed above average coral reef condition, seagrass beds (foraging ground for Green turtle and maybe Dugong), relic mangroves (after the Island was almost submerged by a Tsunami in the 1960s) and many threats. Data has been used to raise stakeholder awareness, especially local/National Government and the extended resident family.

Re-evaluation in 2002 (DKP, Marine & Fisheries Department Protected Areas Section and IPB, Institut Pertanian Bogor, assisted by YACL) declared Pulau Pasoso an MPA worthy of National support. Pulau Pasoso as an MPA fulfills at least 9 of the 16 ICRAN² desirable MPA criteria (with effective management could fulfill 14), and could contribute to all 5 desired outputs.

A2. Management Situation³:

No official management plan or strategy has yet been implemented. Simple conservation measures have been initiated by YACL and the resident family with support from BAPEDALDA (Environment Department). BP Conservation Programme is supporting a one-year Green Turtle data collection project. Destructive fishing has recently been reduced largely through resident family influence. Anchoring is now the main source of ongoing coral damage. Damaging groundings also frequently occur on the two main spurs projecting from the Fringing Reef.

Pulau Pasoso is in the project area of the Regency MCRMP (Marine and Coastal Resources Management Program), an ADB (Asian Development Bank) loan-funded ICZM project running to 2006, but for the present this resource has been co-opted for political purposes. At National level processes and support are in place to carry through longer-term management but only if initial practical and legislative steps are taken locally first.

YACL has set local processes in motion, and funding support has been obtained through to early 2004. The initial stages planned include a Workshop/Seminar to produce stakeholder consensus and initiate legal drafting of Regulations (PERDA) for the MPA. Timing of forthcoming elections make promulgation of specific legislation or apportioning of local funds unlikely before mid/late 2004, under the new Regency Parliament. In the meantime without practical action the process is in danger of losing momentum.

Data is available to plan and implement effective measures. An action plan for immediate impact has been agreed in principle by major stakeholders including the MCRMP consultants, Island residents and relevant Government officials and can be implemented without waiting for further legal processes. Support for tidying-over the consensus-building and legal drafting during 2004, especially over the pre-post election period, is vital. Logistical, socio-economic and political factors make implementation and immediate impact in one calendar year a realistic proposition.

¹ FFA: p2, Principles, especially Principles 6 & 7; p7 Research & Monitoring points 1, 2, 5, 6

² ICRAN Strategic Plan, January 2001, Component 1 - <http://www.unep.ch/coral/icran.htm>

³ FFA : p3 Actions, especially Action 6; p 4 Management points 3 and 7; p5Capacity Building points 1 & 4

B. Proposed Actions and Relationship to ICRI Plan of Action:

ICRI Framework for Action states: “the over-riding priority is to support actions that will have a tangible, positive and measurable effect on coral reefs and related ecosystems, and on the well-being of the communities which depend on them”, and that “developing national capacity [...] will require a long-term commitment”. With Regional Autonomy in Indonesia, capacity at Provincial/Regency level is now essential.

ICRI/ICRAN/GCRMN related programmes/organisations have made substantial contributions since 2000 to data collection and capacity building in Central Sulawesi and in particular at this location, through direct support of the YACL programme “Survey and Monitoring for Management in Central Sulawesi”, involvement in workshops, sharing of information etc. This project is a natural follow-on, using the data and capacity gained to implement effective measures for management of a coral reef area, through actions that will have a tangible, positive and measurable effect on coral reefs and related ecosystems, both immediately and long-term, undertaken by the people and for the people. Specific activities, in three categories, are detailed below. The main relevant Principles and Actions in the ICRI FFA are indicated for each action category.

B1. Physical Structures to reduce damage:

Three types of physical structure are proposed, which will complement each other by creating awareness, avoiding unintentional damage and danger, and providing a viable alternative to destructive practices.

Item	Tangible output	Measurable Effect	FFA Points
Weather-resistant panels indicating the protected status of Pulau Pasoso and mooring regulations. One on site, two at the main visitor departure points.	Panels will have been installed	Direct reduction in the major source of coral damage. Current average is 2 vessels/day, with 2 anchors each, each anchor damages or destroys an average of 0.6m ² of coral reef. Estimated reduction in damage = 432m ² /year from anchoring plus reduction through avoidance of groundings	Principles p.2 No. 3 & 4 Actions p. 3 No 6 (f) Management P. 3-5 No.s 1 (b,e,f) 7 & 12
Two warning markers (using locally understood shapes and international colour code) to prevent/reduce groundings on P. Pasoso Reef spurs.	Markers will be in place		
Six permanent mooring facilities ⁴ (ground tackle/buoys). Two each at 3 sites. Suitable for vessels from 2 up to 20/30 tonnes. Small craft system (canoes etc).	Mooring buoys/system installed and in use		

B2. Rehabilitation & Monitoring:

These actions are the continuation and extension of previous activities supported by ICRI partners.

Item	Tangible output	Measurable Effect	FFA Points
Replant relic/senile mangroves ⁵ (using same species) at Pulau Pasoso, initially with natural seedlings then replacement of casualties and additional planting using nursery grown seedlings produced at nearby Pomolulu village.	- Seedlings planted - Nursery Established - Community involvement in conservation	- Improvement in mangrove ecosystem - “Kelompok” for mangrove rehabilitation/ management formed and operating	Principles p.2 No.s 2,3,5,6,7 Actions p.2 No.s 4,5, & 6 (d,e)
Training in SCUBA and coral reef survey/monitoring for management for six local people including present/future “managers” and individuals capable of becoming future trainers, and Networking ⁶	- Trainees will have participated in collecting, analysing and presenting data - Fourth year of coral reef data for Pulau Pasoso MPA	- Increased local capacity for coral reef survey/ monitoring and management, with human & other resources used effectively - Data used for MPA management	Management p.3-5 No.s 7,12 Capacity Building p.5-6 No.s 1,3,4,7
August/September 2004 Coral Reef monitoring. Data analysis and presentation to stakeholders			
Monitoring and protection of nesting Turtles & hatchlings by resident family with expert assistance	- Data for 2 years - Tagging programme established	- System/Protocols designed & implemented - Increase in nesting/ hatchling success rates	Research & Monitoring p.6-7 No.s 2,3,4,5,7
Hosting a GIS/DataBase for Pulau Pasoso area management to be improved/updated regularly	Data Base Established and Maintained	- Regular use for management purposes	

⁴ Data on vessel type, tonnage, numbers, suitable mooring positions etc available from observation and consultation. Local authorities may construct further moorings late, if successful. Dive company will be requested to contribute larger mooring(s) for their vessel.

⁵ Villagers and Pasoso resident family to carry out all tasks including seedling maintenance.

⁶ Includes co-operation with local Universities to increase capacity for coral reef survey/monitoring and other skills for integrated management of coastal areas.

B3. Awareness Education and Alternative Incomes⁷:

The proposed actions will build the “constituency” for conservation within the MPA and sustainable marine/coastal resource usage in the surrounding area, among both local communities and important decision-makers. Opportunities will be created for improvement in the economic status of disadvantaged coastal community members through a non caritative approach.

Item	Tangible output	Measurable Effect	FFA Points
Production of materials ⁸ covering basic ecological knowledge & awareness, practical skills for conservation in the widest sense, and low-capital sustainable income generation	- Posters, leaflets and other materials produced	- Increase in public awareness, involvement and communication particularly in local communities, regarding NRM generally and Pulau Pasoso MPA specifically	Principles p.2 No.s 2, 3,4,6 Actions p.3 No.s 5, 6(b,d,e,g,h)
Meetings with audio-visual presentations, and distribution of materials in three local communities using the MPA or it's fauna, as part of a wider awareness campaign, including training for and involvement in practical conservation activities such as the mangrove planting, turtle nest protection/data collection or hunting reduction, community or “joint” systems for destructive fishing reduction etc.	- Meetings held - Leaflets/posters distributed - Simple action plans produced and implemented, including selection & planning of subsequent workshops	- Increase in community capacity for natural resource management, including community group plans for simple conservation/NRM actions drawn up and implemented	Management p.3-5 No.s 1(b,e,f,g,h), 3,6,7,12,13 Capacity Building p.5- 6 No.s 1,3,4,6,7,8
Hold Work-shops on topics of local relevance with 5 groups from the 3 villages, including developing and producing relevant materials, drawing up and subsequently assisting in the implementation of action plans	- Materials produced - Workshops held - Economic/NRM activity plans produced and implemented	- Increase in capacity of specific community groups for sustainable income generation, including group plans for action drawn up and implemented	Research & Monitoring p.6-7 No. 7
Colouring/drawing competitions for children in 1 local primary school (seek funds to replicate, using materials and lessons learned, at other schools)	Materials developed Artwork produced by children	- Increased knowledge and awareness among schoolchildren and their families (simple test before/after)	
Promote the developing community-based eco-tourism linking Pulau Pasoso and Labuana	Eco-tourism groups visit the area, staying with local families	- Economic Benefit to local communities - Increased awareness among visitors and locals	
Finalise Guide Book for visitors and locals	Complete file in electronic form	Needed publication ready for production	
Facilitating the effective implementation of Pulau Pasoso MPA through local legislation and Management Plan. Includes targeted presentations (individual or small group) to key decision-makers; facilitating the village with administrative responsibility for Pulau Pasoso MPA in drawing up suitable local regulations (PERDES); and facilitating the process of producing Kabupaten or Provincial level regulations (PERDA) for the MPA and surrounding area	PERDES for regulating the mooring system drafted and passed or process well advanced Draft PERDA and Management plan produced PERDA consultation & ratification process underway	- Furthering of legislative/other processes necessary for effective long-term management, including regulations, planning, and financial support - Increased awareness and support for Pulau Pasoso MPA and conservation/NRM among key decision-makers	

B4. Long-Term and Indirect Output/Benefits:**1. Reversal of Environmental Degradation**

- Improvement in Coral Reef Condition: through reduction in the main source of damage at Pulau Pasoso (anchoring) and community awareness regarding activities such as destructive fishing, coral mining, protected species, waste disposal etc.
- Mangrove Restoration: as the seedlings grow, the Mangrove stand on Pulau Pasoso will be restored to pre-Tsunami condition. The experience and skills can be used to promote community-based mangrove restoration in other degraded Mangrove stands in the area.
- Reduced threats to protected/endangered species and ecosystems through better understanding and co-operation, including local community members, decision-makers and “enforcement” personnel.

⁷ Mainly in one community to the South (Labuana) and two villages to the North (Labean and Pomolulu)

⁸ Posters, leaflets, training materials already designed and/or adapted by YACL cover ecological knowledge of coral reefs, mangrove and seagrass, protected species, environmental hygiene, and simple activities for improving local incomes through sustainable use of locally available resources.

2. Improved Capacity for Sustainable Resource Management/Conservation

- Improved knowledge, skills in local communities and other stakeholders, including in monitoring and practical conservation work, plus improved awareness and caring will form the basis for longer-term community-based or co-operative (community + government or other) conservation/sustainable resource management in and around the MPA.
- On-going networking at local, national and international levels will assist in building a firm support base for long-term conservation in and around Pasoso MPA and for applying lessons learned more widely, especially in other parts of the District, Regency and Province, where to date there is no effective MPA.
- The materials and procedures will be available for use with minor adjustments at many other locations

3. Contribution to National Goals and Linkages to other ICRAN Activities

- Indonesia is committed to a vast increase in MPA area and effectiveness. Promoting Pasoso from a paper Provincial Park to a true, nationally/internationally recognised MPA and laying the foundation for additional community-based MPAs in nearby communities and/or an increased “buffer-zone” will contribute to both these goals.
- The proposed project would be linked into the Indonesian Reef Check Network, the Global GCRMN Network including the UNEP/GEF SCS Meta-database, communicate with and learn from other National and Regional initiatives such as the Bunaken ICRAN MPA programme, COREMAP Media Centre, UNEP EAS/RCU, etc and would wish to participate in the developing ICRAN MPA Network for the SE Asia region.

4. Potential Additional Benefits

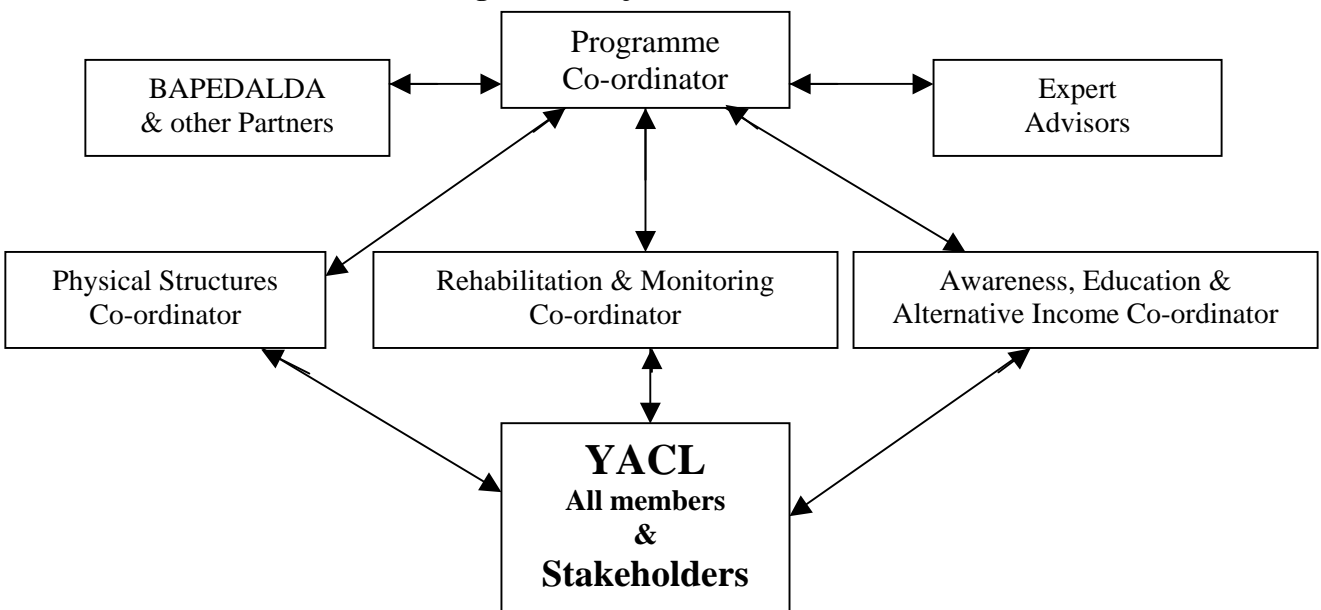
- **Leverage of Funding:** The ICRI support would enable YACL and other partners to apply for additional funding, both internationally and nationally, for which a local and/or additional contribution is necessary (such as the NOAA International Coral Reef Conservation Awards and many National Government fund allocations), in order to widen the scope (activities and geographical coverage) and implement longer-term measures.
- **Value as an Example:** ICRI support for a practical example of “hands-on” conservation in Central Sulawesi could potentially have wide impact throughout the Province, which includes many other areas worthy of attention, such as the Banggai and Togean Archipelagos and a host of lesser-known areas, many under dire threat (such as Tanjung Api Nature Reserve, IUCN Category I), none of which (despite some reports to the contrary) have effective conservation to date.

C. Work Plan

C1. Implementation Team

The implementation team would be structured as per Figure 1 below.

Figure 1 - Project Team Structure



C2. ICRI Recognition:

ICRI assistance will be acknowledged on all correspondence, reports and other printed/audio-visual outputs (publications, CDs and other electronic media, web-site, press releases etc) produced in connection with these activities. The ICRI logo will be made visible on physical structures where possible.

C3. Timetable

The timetable below is approximate, and indicates in which months activities would take place, not the length of time involved. Changes could occur due to weather, socio-political or other considerations.

No.	Description	April	May	June	July	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar
1	Physical Structures												
1a	Preparation												
1b	Socialisation - Initial												
1c	Construction of Panels												
1d	Installation of panels												
1e	Construction/Installation of markers												
1f	Construction/Installation of Buoys												
1g	Socialisation - post installation												
1h	Monitoring/evaluation												
2	Rehabilitation & Monitoring												
2a	Mangrove re-planting:												
2b	Preparation & Socialisation												
2c	Preparation of seedlings/location												
2d	Nursery												
2e	Planting												
2f	Maintenance												
2g	Monitoring/evaluation												
2h	Training - survey etc												
2i	Coral Reef Monitoring												
2j	Co-operation (University, local Government etc)												
2k	GIS establishment and updating												
2l	Turtle Monitoring (nest sites etc)												
2m	Turtle Evaluation												
3	Awareness, Education, Alternative Income												
3a	Preparation of materials												
3b	Initial meetings (3 villages)												
3c	Workshops (3 villages X2)												
3d	Competition												
3e	Eco-tourism promotion												
3f	Facilitation of local legislation												
3g	Compilation of Guidebook												
4	Administration												
4a	Programme Administration												
4b	Reporting (or as required by ICRI)												

C4. Budget

To carry out the planned activities, YACL requires the following funds. Additional contributions are anticipated from local or other sources for items marked "contribution". The budget assumes that funding to cover contingencies and for most everyday organisational overheads and most staff costs not directly related to this project will be met from other sources, which are likely to include work on local or National Government projects, further survey/monitoring/community development programmes at other sites, small-scale eco-tourism activities, and partnership with other organisations. The amounts shown should cover the very basic minimum to allow this project to run, with no allowance for other activities or contingencies.

Items have been made as discreet as possible so that ICRI could choose which items to fund. However unless other funding for this period is already definite, it is imperative that co-ordinator/sub-co-ordinator remuneration, transport/communications and reporting related overheads are covered, as without these the remainder of the programme cannot be implemented. Any specific activities felt to be excessive in terms of cost could be postponed or submitted to other funding sources. ICRI would be clearly named as the main or sole donor as appropriate for all items supported in all media which YACL can control.

Table 5 - Project Budget

No.	Item	Unit	Qty	Unit Cost	Total
1	Physical Structures				4450
	Navigation Markers	Each	2	75	150
	Information Panels	Each	3	100	300
	Mooring Buoys	Each	6	300	1800
	Small boat mooring system	Set	1	400	400
	Installation of Buoys	Package	1	600	600
	Logistics (Transport, Supplies, Communications etc)	Package	1	600	600
	Sub-project co-ordinators	person	2	300	600
2	Rehabilitation & Monitoring				3600
	Mangrove Restoration				
	socialisation	Package	1	300	300
	Planting	Package	1	250	250
	maintenance	month	6	25	150
	Turtle and Coral Reef Monitoring				
	Turtle nesting monitoring & nest protection - regular	month	12	25	300
	Evaluation/data collection visits	each	2	200	400
	Coral Reef Monitoring 2004 (Manta Tow, Reef Check, LIT)	Package	1	600	600
	Train six persons in coral reef survey/monitoring methods (including PADI dive certification)	Package	1	600	600
	Logistics (Transport, Supplies, Communications etc)	Contribution	1	700	700
	Sub-project co-ordinator	Person	1	300	300
3	Awareness, Education, Alternative Income				9600
	Community Meetings	Meeting	5	300	1500
	Poster Production (5 types)	each	1000	1.1	1100
	Information Leaflets - Ecology (5 types)	each	1000	0.8	800
	Information Leaflets - Activities (5 types)	each	1000	0.8	800
	School Materials & Competition	package	1	900	900
	Workshops	each	10	300	3000
	Eco-tourism promotion	package	1	500	500
	Logistics (Transport, Supplies, Communications etc)	Contribution	1	1000	1000
	Sub-project co-ordinators	Person	2	300	600
4	General overheads				3400
	Salary - Co-ordinator/administration	month	12	100	1200
	Boat Captain/crew (part time)	month	5	50	250
	Other specialist short-term labour	Package	1	500	500
	Co-ordination & Co-operation with other organisations etc	Month	12	100	1200
	Report Production & Distribution	Package	1	250	250
	Total				21050

D. The Proposing Organisation:

Organisation: Yayasan Adi Citra Lestari (YACL), local not-for-profit NGO founded on 2/2/2000
 Specialised in Marine/Coastal and Irrigation/Water Management
 Contact Person: Abigail Moore, MSc. YACL Marine Consultant
 Project Director: Andi Sofyan SP. YACL Director
 Key Persons: Dr Elim Somba, GIS and ICZM, UNTAD
 Samliok Ndobe, MSi. Head of Fisheries Department, Universitas Alkhairat
 Andi Syahrul Yotolembah SE, Head of Monitoring & Conservation, BAPEDALDA
 Pak Achmad, Head of Pasoso Island Family
 Contact Address: Jl Tendean No 7, Palu 94111, Sulteng, Indonesia
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 Website: <http://www.yacl-sulawesi.org>

YACL Background & Experience:

- Founded on 2nd February 2000 in Palu, Central Sulawesi Province by group of people concerned about the degradation of Natural Resources, in particular the lack of data and capacity for data collection related to the Province's Marine & Coastal Ecosystems (especially Coral Reefs), and by the lack of professionalism or intellectual integrity among many local "environmental" NGOs
- Local partner in Reefs at Risk SE Asia, 2000/2001 with WRI/ICLARM
- YACL's own Marine Programme since 2000 has included capacity building in marine survey work (dive and survey training, equipment, other skills) and data collection; working to build awareness of the plight of coral reefs in the Province, including presenting data to managers, decision makers and other stakeholders; and working with them towards local solutions, with some success in spite of many set-backs and obstacles (such as the (in)famous trio KKN - collusion, corruption & nepotism)
- Other work has included:
 - Facilitating the hand-over of irrigation systems to farmers
 - Identifying alternative/sustainable livelihoods for coastal and inland communities, especially those involved in destructive/illegal activities
 - Assisting the DKP (Marine and Fisheries Department) in the evaluation of proposed National MPAs, specifically with underwater data collection and analysis, including the Togean Islands (now confirmed), Banggai Archipelago (in process, further expedition delayed by renewed Poso unrest) and Pulau Pasoso (already a Provincial MPA)
- Major support received from:
 - WRI/ICLARM (2000/2001)
 - UNEP EAS/RCU (2000/2001/2002)
 - The David & Lucille Packard Foundation (2001/2002, 2002/2004)
 - PADI Project Aware (2001)
 - NOAA (2002/2004)
 - BP Conservation Programme (2003/2004, marine turtle sub-group)
- YACL regular staff (6 full-time + 5 part-time + volunteers) are assisted by a number of experts who give their time and skills as necessary, mainly senior University lecturers and other civil servants with relevant expertise and experience. Skills/expertise include GIS, Integrated Resource Management, Fisheries (capture and aquaculture), Intermediate Technology, Social Science, Economics including Small Business Management, Organisational Management (Kelembagaan), and most aspects of Agriculture. The only non-local staff member is the contact person, Ms Abigail Moore (British): PADI Instructor, experienced GCRMN survey practitioner, with a BSc in Ship Science and an MSc in Global Biodiversity, Monitoring & Conservation.
- The YACL survey team (staff and volunteers) now includes 11 regular and 4 occasional PADI SCUBA Divers, the Captain/crew of Dolphins, YACL's dive boat, and a growing support group
- YACL has been working and gathering data at Pulau Pasoso since July 2000, and has built up good relations with the resident family and other key stakeholders
- YACL has the support of the resident family, BAPEDALDA, the local Universities (UNTAD and Alkhairat, particularly the Faculties of Fisheries and Agriculture) and other stakeholders including neighbouring village leaders.
- Local and National resources are increasingly likely for financial support and to ensure long-term conservation benefits.

E. Abbreviations:

Only non-ICRI member/associate abbreviations are listed

BAPEDALDA:	Provincial level Department of the Environment
BP:	British Petroleum
DKP:	National Marine AND Fisheries Department
ICZM:	Integrated Coastal Zone Management
NRM:	Natural Resources Management
UNTAD:	Universitas Tadulako