# Indonesian Coastal University Network (INCUNE) Strategy

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### **INCUNE**

and

## PROYEK PESISIR

(Coastal Resources Management Project)
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## STRATEGIC PLAN FOR THE DEVELOPMENT AND STRENGTHENING OF THE INDONESIAN COASTAL UNIVERSITIES NETWORK (INCUNE)

#### **BACKGROUND**

Universities perform an important role in coastal resources management, particularly in initiating and developing effective coastal management activities, and providing credible academic authority and leadership. Recognizing this, the Coastal Resources Center (CRC) of the University of Rhode Island has, through *Proyek Pesisir*, initiated the Indonesia Coastal University Network (INCUNE) in 1999. This is aimed at drawing on the collective strengths of individual universities in coastal resources management and facilitating their efforts through an effective networking mechanism.

Eleven Universities are presently in the Network:

- UNRI State University of Riau in Pekanbaru
- University Bung Hatta in Padang
- UNILA State University of Lampung in Bandar Lampung
- IPB Bogor Agricultural University in Bogor
- UI University of Indonesia in Jakarta
- UNDIP Diponegoro University in Semarang
- UNMUL Mulawarman University in Samarinda
- UNHAS Hasanuddin University in Makassar
- UNSRAT Sam Ratulangi University in Manado
- UNPATTI Pattimura University in Ambon
- UNCEN Cendrawasih University in Manokwari

#### PRESENT STATUS

During the past year, INCUNE has developed rapidly in securing the support from present member universities and in providing adequate computer support for electronic communication and networking.

At the first meeting in Jakarta on March 15-16, 1999, members agreed that the Network should

- 1. focus on the practice of coastal management, and *not* on research and theory
- 2. be committed to building capacity to enable universities to contribute more effectively to local coastal resources management (CRM) policy and programs.

Members also agreed that cooperation is essential if universities are to be effective in facilitating and institutionalizing CRM and they collectively expressed the strong desire to readily share and disseminate jointly-produced training and reference materials.

At the second meeting in Manado on 27 September to 1 October 1999, members conducted a SWOT analysis in relation to INCUNE development. The *strengths* identified were great enthusiasm among members including strong awareness and commitment, shared interest in CRM, wide experience in a variety of CRM issues and wide-ranging expertise, and adequate operating facilities and infrastructure. *Weaknesses* included lack of knowledge on the process of effective collaboration, institutional bureaucracy, lack of operational financial support, uncertainty over expectations of time and manpower requirements, varying levels of capacity and capability among members, and the present lack of coordination, communication and integration.

Recognized *threats* were increasing problems in coastal and marine areas enhanced by globalization, global changes, intense stakeholder competition, and rapid advances in information technology. The Indonesian Government's recent commitment towards greater regional autonomy and the creation of a totally new Ministry of Marine Affairs and Fisheries presented universities with the opportunity to expand their role and participation in coastal and marine management. Increasing awareness of coastal and marine issues and available facilities, infrastructure and expert ise in Indonesian universities add further to the propitious time to take an active role.

As established institutions, universities can capitalize on their long-term experience in coastal and marine management in the areas of research, teaching and extension services. Furthermore, they contribute effectively to national development and are at the forefront of knowledge generation, dissemination and application. The longevity of universities ensures that there is continuous "institutional memory" which develops and expands with local research and extension. This remains a key strategic advantage of universities and is particularly important in the context of the Indonesian society that is currently experiencing a difficult but necessary cultural transition in institutional organization.

Indonesian state universities are faced with a decline in the level of government funding as they are transformed into autonomous entities. INCUNE can provide the avenue for member universities to make combined and stronger bids for projects and consultancies from international donor agencies. This can help to overcome some of the constraints imposed by government funding reductions.

Adding further to this advantage, strong collaboration between universities is essential to enhance their participation in coastal and marine resources management. While universities by themselves have the interdisciplinary capability and various experiences in CRM, there is a need to share experiences and information in order to increase the collective capacity for active involvement with the full range of CRM issues. There is indeed strong enthusiasm among the members. Personal contacts established during the early development of INCUNE have proven useful and will contribute significantly to the further development of INCUNE.

This proposed strategic plan for the further development and strengthening of INCUNE takes into account the findings of the SWOT analysis and a review of the capacities of member universities. It also takes into account, the comments and suggestions received at a meeting of INCUNE members held in conjunction with the Second National Coastal Conference in Makassar in May 2000.

#### **VISION AND OBJECTIVES**

The shared vision for INCUNE formulated by members is to develop combined capacity of participating universities to help solve coastal and marine management problems through shared information, resources and experience.

To fulfill its vision, INCUNE's main objectives are to:

- establish an effective network of coastal universities throughout Indonesia to strengthen collaboration between them and their partners
- further develop the capacity of members and their partners to expand their direct involvement in coastal and marine resources management
- provide coordinated responses efficiently to national, regional or global issues concerning the coastal and marine environment
- enhance its contribution on coastal and marine resources management to the international community.

These objectives directly translate the vision into action by 1) raising institutional capacity, and 2) raising capacity of universities for stronger participation in coastal and marine resources management. INCUNE draws on the combined strengths of member universities to respond more effectively and efficiently to strategic research requirements, and to strengthen linkages with international organizations.

#### ORGANIZATIONAL STRUCTURE AND WORKING MECHANISM

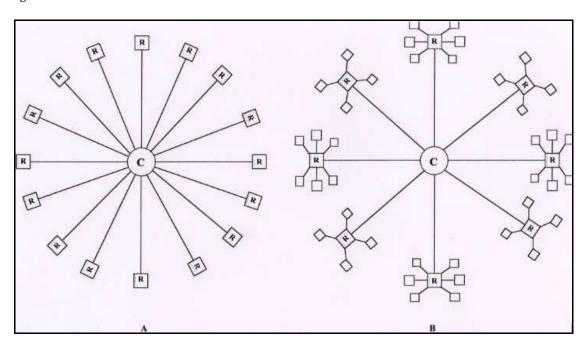
Although there are advantages and disadvantages to either a formal or an informal network (Table 1), a formal networking arrangement is desired to ensure continuity and focused development over the long term. In addition, a formal arrangement secures recognition from university authorities and other agencies.

It is suggested that the following organizational structure be adopted: a central coordinating node supported by a number of regional coordinating nodes. The regional coordinating nodes serve to bring together other interested universities, and to link up with government agencies, non-government organizations and related institutions connected with coastal management. This structure will prevent the central coordinating node from an increasingly heavy workload as the network expands (Fig.1). The regional coordinating nodes should cooperate closely with other universities in their area and capitalize on their relationship with local authorities, agencies and relevant stakeholders. This organizational structure permits natural expansion as more universities join INCUNE.

Table 1. Advantages and disadvantages between a formal and an informal network.

	ADVANTAGES	DISADVANTAGES
FORMAL NETWORK	Stronger recognition from university /international agencies. Built-in driver/accountability mechanism. Focused direction.	Time needed for planning and consensus on operational process
INFORMAL NETWORK	Time saved as there is no necessity to formalize any operational process.	Little recognition from university/agencies. No driver/accountability mechanism. Diffused direction.

Fig. 1. Diagrammatic representation of organizational structure showing relationship between central coordinating node (C) and regional coordinating node (R). In 'A' each member including new ones is directly linked to the central coordinating node placing an increasingly heavy reliance on the central coordinating node. In 'B', member universities serve as regional coordinating nodes and are the only ones with a direct link to the central coordinating node. They relieve the central coordinating node from an excessive coordinating function as the network expands by taking over regional coordination with other regional/local universities and partner agencies.



In view of IPB's close association with *Proyek Pesisir* from the early beginning, its strength and resources in CRM (through its Centre for Coastal and Marine Resources Studies), and general consensus among member universities, it is highly recommended that IPB take on the role of the central coordinating node. To enable IPB to perform this function, it has to be provided with additional manpower resources. The other current member universities are well distributed throughout the country and can effectively become regional coordinating nodes.

Regular reviews are needed to determine if more (and which) universities should be incorporated as additional regional coordinating nodes. To be considered, new members should fulfill certain criteria (such as demonstrated strengths in coastal and marine resources management, institutional commitment, and preparedness for collaboration). New members should be provided with the basic computer support and minimal manpower support (possibly a full-time junior staff to service the regional node's coordination effort). Existing members have been provided with computer support and should be given minimal manpower support.

Formation of a network is relatively simple, but the strength of a network to fulfill its objectives rests fully with the commitment expected of members. It is useful to note that present member universities (most of them) have provided space for the computer and peripherals to be used for electronic information exchange, and in many cases linked them to Local Area Networks. Most have already established INCUNE working committees comprising academic staff from various Departments and Faculties. For some universities, the INCUNE coordinator establishes direct contact with colleagues from other Faculties and/or use operational procedures within the University to promote inter-disciplinary awareness and participation. Such working committees are formalized with endorsement from the Rector. Many of the universities have academics who are competent and comfortable with computers.

#### INCUNE NETWORK DEVELOPMENT

Information-sharing and capacity-building are the main goals of INCUNE. Information on research experiences and case studies in CRM, teaching materials, training activities, recommended texts and books, and eventually web-based learning can be placed at INCUNE's web-site. INCUNE can serve as an efficient vehicle for the sharing of information between member universities and CRM stakeholders, and facilitating capacity of stakeholders through training.

At the Manado meeting in September 1999, members agreed that INCUNE's web-site operate under the present internet site <a href="www.indomarine.or.id">www.indomarine.or.id</a> and that it maintains its own web-site when it receives sufficient funding support. It was also agreed that network members respond to e-mails (even an acknowledgment of receipt will suffice) within 3 days. The issue of web-site server efficiency was discussed at the Makassar meeting in May 2000, and it was agreed that a faster internet server be used for the web-site to facilitate information flow.

Students from some member universities requested the use of INCUNE as a forum to represent their views on CRM. All things considered, it will be best for students to develop their own web-sites that can be linked to INCUNE's web-site.

Examples of materials that can be placed on the web-site include:

- CRM problems and experience. Different dominant issues operate in each place. Each member university approaches CRM issues by capitalizing on its area of expertise/strength. The sharing of such problem-solving experiences through different facets is most valuable and will help improve management capacity.
- Reacting to common problems e.g. socio-economic impact of bleaching member university can be requested to conduct local studies. The results, when combined, give the status of the issue from a national perspective within a short time.
- Institutional strategy (experience of each university in contributing to INCUNE what organizational structures have been established within their universities to support the operation of INCUNE).

#### **CONSTRAINTS**

Varying levels of capacity in information technology are evident among the universities but this should not pose a large problem to the development of INCUNE. Training could be provided to overcome this. Universities are aware that computer technology is improving rapidly and that any delay in embracing this technology can only be detrimental to their capacity to contribute to INCUNE development. Information technology is predicted to grow a million times by 2030 and its use and application certainly cannot be ignored. Member universities must take effective measures within their means to be well prepared.

Some universities face a real problem in securing additional telecommunication lines as service providers are overwhelmed by demand. Communication lines are sometimes too congested that there is difficulty in assessing the internet or in quick transmission and retrieval of materials. This problem is difficult to address. It is hoped that telecommunication services will improve and an interim solution will be to depend on hard copies and the mail service until the situation improves.

Power supply interruptions are frequent in some universities and do cause inconvenience to users of electronic communication. Uninterrupted Power Supply units can alleviate the problem to some extent but not when the electrical supply fails for long duration. This problem, together with unavailability of telephone lines, poses constraints that have to be recognized.

However, the advantages of an electronic network for information sharing are enormous. At the national level, it enhances the strengths of member universities by enabling them to combine resources, expertise and experience. This combined capacity gives member universities greater power in their involvement with coastal and marine resources management. The wealth and diversity of first-hand experiences in the practice of coastal and marine resources management developed by INCUNE is of great benefit to regional and international coastal management stakeholders. INCUNE therefore has the opportunity

to contribute to coastal and marine management throughout the region and the world. It can be an effective partner to regional and international networks such as UNEP's Network for Environmental Training at Tertiary Level in Asia and the Pacific (NETTLAP).

#### **PROPOSED ACTIVITIES**

Proposed activities are categorized under i) networking arrangements, and ii) capacity enhancement.

#### i) Networking arrangements:

#### Coordination strengthening

The coordinating mechanism as outlined under "Organizational structure and working mechanism" should be implemented and tested to quickly identify and address unanticipated difficulties. This is crucial to the progress of INCUNE. Once in place and working effectively, the central coordinating node or any of the regional nodes can alert members to national/regional/global issues that require a combined/coordinated response. For example, a request from an international/regional agency for a national review of coastal management issues or status assessment of coastal and marine resources can be more reliably and authoritatively addressed by INCUNE. The network can adequately address donor organization interest by providing a coordinated source of information on participating universities. It will also help to avoid duplication of efforts as members can be kept informed of what have already been done or are being conducted by each member in coastal and marine resources management.

#### Institutional strengthening

All participating universities should, within the first year of strategic plan implementation, strive to establish greater awareness of INCUNE within their institutions and to encourage effective collaboration between academics from different disciplines. Greater intra-university participation will support stronger involvement of participating universities in local CRM activities and INCUNE. Intra-university publicity of INCUNE can be best combined with simple functions such as the launching of the recently published INCUNE prospectus.

#### Web-site protocol

A protocol for placing materials on the web-site should be established and should include lines of accountability. INCUNE should register its own web-site with an efficient service provider.

#### Materials to be placed on web-site

Members should decide on categories of CRM-related materials to be placed on the web-site (e.g. training, extension, formal and non-formal education). This will facilitate organization of materials for easier retrieval of specific information. For a start, members should provide the following information: i) list of academics and expertise related to CRM, ii) facilities that can support CRM activities, iii) teaching programs in CRM, and iv) list of thesis relevant to CRM. At a later stage, member universities can begin to share CRM case studies.

#### Organizational meetings

Regular meetings of INCUNE coordinators from member universities are necessary to monitor, evaluate and direct further activities. The frequency of these meetings could be on an annual basis during the first few years, and then biennially as INCUNE becomes more established and regional infrastructure support for electronic communication support improves.

#### Newsletter

During the Manado meeting, members expressed the desire to publish a quarterly newsletter for distribution to all universities in Indonesia, NGOs, research centers, and The Indonesian Center for Scientific Documentation. This hard copy newsletter will be useful as many of the private universities and NGOs may not have convenient computer accessibility.

#### *ii)* Capacity enhancement:

#### Technical meetings

Regular meetings for researchers of member universities will facilitate exchange ideas and first-hand experiences on CRM practices. While electronic communication will help to provide information flow sharing, meetings are still useful for in-depth discussion, immediate clarification and comprehension, and provide the opportunity for on-site field observations. Such meetings can be incorporated with national conferences and/or international conferences held in Indonesia, and funds better utilized in supporting participation.

#### Training

Training in the form of short-term workshops is desired to improve overall capacity to deal with coastal and marine resources management. Workshops to train trainers have an effective multiplier effect where the trainers can proceed to conduct training in their provinces. Training in the following aspects are identified:

- Grant-writing to improve success rate of securing grants from external agencies
- Project management and development to increase overall efficiency in the management of major externally-funded projects to meet with objectives
- Extension training to raise capacity of communities and major stakeholders
- Communicating with the media and major stakeholders
- Integrated coastal management.

#### Internship programs

Short-term attachments of graduate students and academic staff to CRM field sites of member universities for "hands-on" learning experience should be facilitated. The benefits of such exchanges are tremendous for capacity enhancement.

#### Study tours

These have been demonstrated to be useful and valuable for learning. Sending of teams comprising academics, researchers and major stakeholder representatives to visit sites within Indonesia or the region where successful coastal and marine resources management programs are being implemented, will significantly raise the learning value.

#### Education

The network's capacity for both formal and non-formal education can be reinforced through the sharing of training materials. Apart from degree programs, members could be supported in their implementation of public education and awareness programs for stakeholders. The expansion of the community service charter of member universities to incorporate a continuing public education program should be encouraged. Again, the sharing of training materials has pivotal importance.

#### Local field days

Member universities should organize regular "open days" where they can showcase their research, development and extension activities and at the same time attract other potential INCUNE members and partners. These events will attract media coverage and provide the needed publicity and exposure of the important role of universities in coastal and marine resources management.

#### PROPOSED SCHEDULE

A 5-year plan is proposed for the further development and strengthening of INCUNE to a level where member universities will have a significant impact in national coastal and marine resources management and can provide effective contributions to international experience in CRM. Manpower support should be provided to member universities currently equipped with computing facilities from the preparatory phase, while the same level of support should be considered for potential new members.

Milestones to be targeted over the next five years are as follows:

#### First year

- Proposed organizational structure firmly established.
- Intra-university publicity activated and support of faculty from different disciplines obtained.
- Following information items provided by members: 1) institutional strategy to support INCUNE, 2) list of academics and expertise related to CRM, 3) facilities that can support CRM activities, 4) teaching programs in CRM, and 5) list of student theses relevant to CRM.
- Newsletter (quarterly basis) initiated.
- Web-site protocol established and registered with efficient service provider.
- Publicity to international donor agencies established.
- Organizational meeting to review first year progress/performance and identify activities for second year.

#### Second year

 Links between member universities and local partner agencies and other universities consolidated.

- Information and experiences on local CRM case studies contributed by members to web-site (continued and expanded in subsequent years).
- INCUNE's links with international donor agencies and networks strengthened.
- Capacity-building programs (mainly training of trainers) for member universities and CRM stakeholders (training workshops, internships, study tours) planned and initiated.
- Publicity among local CRM stakeholders expanded through public education and awareness programs and local field days (on annual basis).
- Training and teaching materials contributed by members to web-site (continued and expanded in subsequent years).
- Organizational meeting to assess second year activities, refine action plan for third year, and review need for incorporating additional members.

#### Third year

- Local capacity-building programs expanded (continuing in subsequent years).
- Web-site materials expanded and consolidated (continuing in subsequent years).
- Capacity-building programs for members, local partners and CRM stakeholders established and expanded (continuing in subsequent years).
- Jointly-produced training and teaching materials developed and placed in web-site (continuing in subsequent years).
- Technical meeting/symposia in conjunction with organizational meeting.

#### Fourth year

- INCUNE's exposure and capability to international agencies firmly established.
- INCUNE's strength and contribution to national and provincial coastal and marine resources management initiatives fully demonstrated.
- INCUNE's capacity-building strength solidly developed.

#### Fifth year

- Organizational meeting to develop the next 5-year plan of action.
- Technical meeting/symposia.
- Continued expansion and strengthening of INCUNE.
- Maintenance of a high profile among regional/national governments and agencies, CRM stakeholders, international agencies and the international community.

