



# PACE-NET

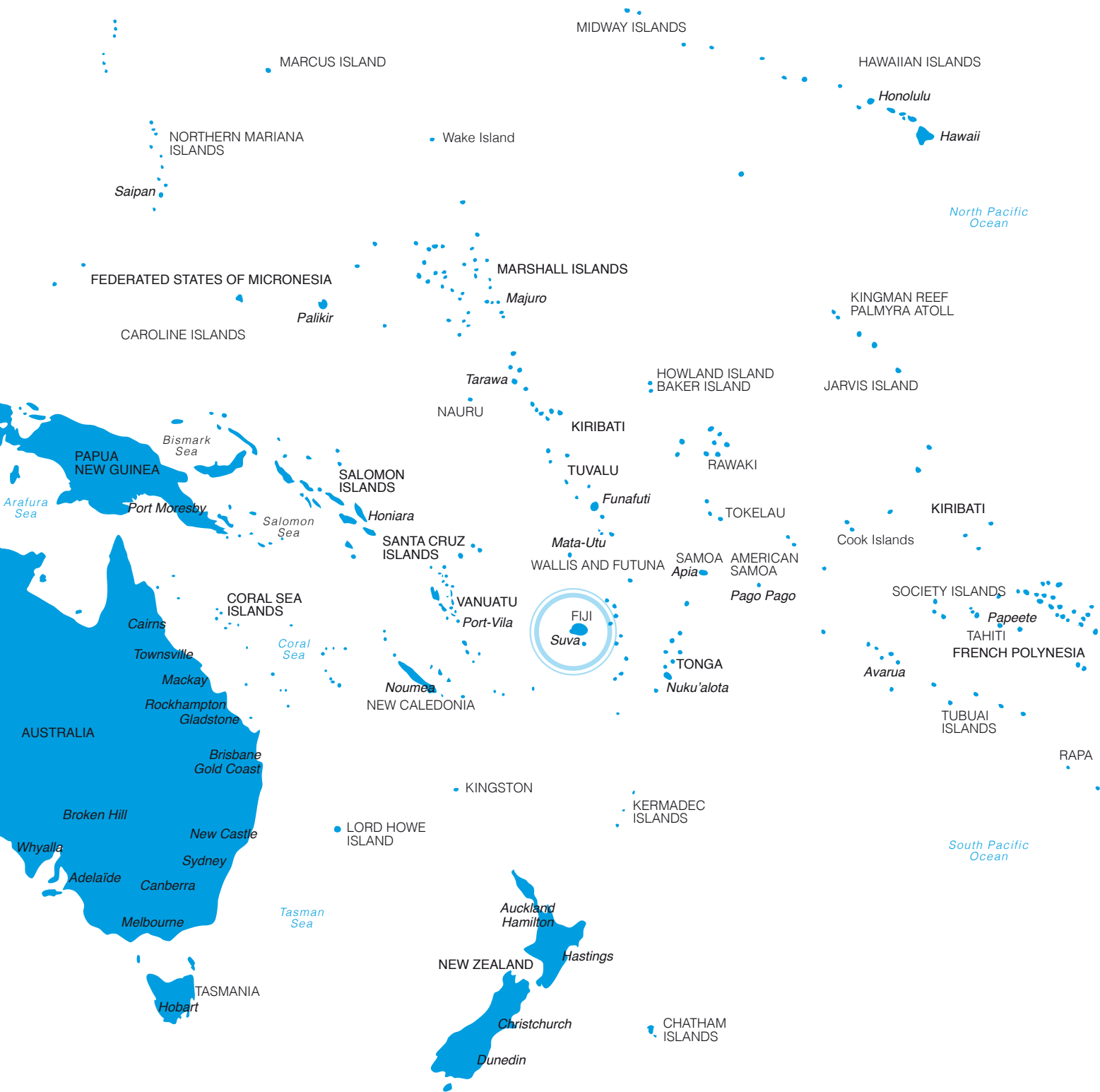
PACIFIC EUROPE NETWORK FOR SCIENCE AND TECHNOLOGY

## RECOMMENDATIONS

*for a Strategic plan on  
Research, Innovation  
and Development  
in the Pacific*



for a Strategic plan on Research, Inno



## PACE-NET implemented a sustainable discussion forum on the role of research in S&T in the Pacific...

The successful Conference in Suva marked the end of the PACE-Net (Pacific European network) three-year project. The project has been successful in strengthening the bi-regional dialogue on Science and Technology between Europe and the Pacific on global and regional priorities of mutual importance; in identifying potential research partnership projects addressing these priorities; and most of all, in raising awareness of the critical importance of the Pacific region to global sustainability and the vulnerability of its island countries.

Beyond intensive networking involving more than 200 key stakeholders in S&T research from the regional and bi-regional scales and an increased visibility of the project, its first positive outcome is the fruitful dialogue that has been established between Europe and the Pacific on the opportunities but also on the barriers to participation in the European Commission (EC) framework programme. The political and scientific reflection within the project has also contributed to the elaboration of the last bilateral (BILAT) roadmaps with Australia and New Zealand.

In the framework of our awareness raising campaign with the EC, policy briefs have been received with much enthusiasm by the respective thematic Directorates-General. Their contents should help in the outlining of a strategic framework for bi-regional (Europe-Pacific) cooperation in S&T research, and also to initiate research plans of some of the Pacific Island countries and territories.

Among other positive outcomes: our regular interactions with the NetBiome ERA-Net on Biodiversity; and developing synergies with the Great Observatory of Marine and Terrestrial Biodiversity of the South Pacific (GOPS) that have generated several regional Memoranda of Understanding.

The project also inspired individual or collective initiatives (in Europe and in the Pacific) and has fed into other workshops, networks or projects: the Pacific Islands Regional Universities Network (PIURN) initiated by the Center for Agriculture and Rural Cooperation (CTA), the United Nations Educational, Scientific and Cultural Organization (UNESCO) and the University of South Pacific (USP) in November 2012 or the contribution of our partner DLR in Göttingen in September 2012 on «Resilience of agricultural systems against crises» to name a few. Last but not least, UNIDO (United Nations Industrial Development Organisation) is now setting up development projects with SPC (Secretariat of the Pacific Community) and other regional bodies.

On the basis of these outcomes and encouraged by our European and Pacific partners, IRD (Institut de Recherche pour le Développement) has answered the call for projects for a follow-up INCO-Net targeting the region. The future PACE-Net Plus project has been favorably evaluated by the European Commission and should start by the end of 2013.

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# PACE-NET\* KEY STAKEHOLDER CONFERENCE

## CONNECTING RESEARCH AND INNOVATION FOR DEVELOPMENT IN THE PACIFIC

SUVA, FIJI 12th – 14th MARCH 2013

Enthusiastic discussions on results of the three year Pacific-European Network on Science and Technology (PACE-Net) were held by more than 120 delegates from about 17 Pacific and European countries and territories at the final PACE-Net Conference hosted by the University of the South Pacific (USP) in Suva Fiji from 12-14 March.

The Fijian Minister for the Environment, Colonel Samuela Saumatu, in opening the Conference, emphasized the need for policies to be founded on good scientific information, particularly because of the Pacific's vulnerability to global change. He acknowledged that this was an area that needed strengthening in the Pacific.

Mr. Andrew Jacobs, Head of delegation of the European Union (EU) for the Pacific based in Suva, stressed the EU's active involvement in: regional and global areas of common concern; capacity building; and its continued commitment to research and development. V.C. & President of USP, Prof. R. Chandra outlined USP's commitment, as a regional organisation, to increasing the role of science and technology in regional policy development, in capacity building and in networks with other Pacific Island Universities. Dr. Jimmie Rodgers, Director General of SPC, underlined the importance of research for Pacific countries to respond to their challenges and to improve their development. For this, he adds that research institutes, policy makers, regional organisations, private sector will have to all work together.

PACE-Net results included: strengthening the EU-Pacific bi-regional dialogue on Science, Technology and Innovation (ST&I); identifying the general absence of regional and national ST&I policies and plans in the Pacific; catalysing the formation of the "Pacific Islands University Research Network" (PIURN); and assisting initiation of a national ST&I policy framework process in Papua New Guinea. In addition, PACE-Net raised awareness of the critical importance of the Pacific – a region of extraordinary physical, social and economic diversity – to global sustainability and of the vulnerability of small island nations to global change.



PACE-Net developed policy briefs which present priority research and development needs in seven thematic areas in the Pacific, Climate Change in relation to: Freshwater in the Pacific; Agriculture and Forestry; Fisheries and Aquaculture in the Pacific; Natural Hazards; Biodiversity and Ecosystem Management; and Health. These identified opportunities for bi-regional research partnerships and projects to address priority areas.

An information session on EU research and innovation framework programmes and mobility schemes detailed experiences in and opportunities for international collaboration between Europe and the Pacific. Research facilities were explored at the





*PACE-Net Key Stakeholder Conference, Suva, 12-14 March 2013*

Conference which also further stimulated initiatives for research collaborations.

A range of recommendations for enhancing the use of research in policy formulation were developed including the creation of regional thematic task forces for research coordination.

Delegates from Tuvalu and Tonga spoke for all participants when they thanked the European

Commission (EC), IRD and the PACE-NET Consortium for their generous support for PACE-Net and concluded that both the project and the final Conference, organised and run by USP, were highly successful and valuable and that wide dissemination of the outcomes of PACE-Net would catalyse the development of national and regional research policy frameworks in the Pacific.

\* Coordinated by IRD (Institut de Recherche pour le Développement), PACE-Net (Pacific Europe Network for Science and Technology) is an INCO-NET funded by the European Commission.

> More info on PACE-Net: <http://pacenet.eu/>

> More info on the Conference: <http://suva-conference.pacenet.eu/>



## 1

## BACKGROUND

### SIGNIFICANCE OF THE PACIFIC

The Pacific is known as a 'sea of islands' (less than 2% land), a constellation of small-scale countries which, in terms of research, can be considered as an environmental and societal laboratory of exceptional value. Instead of thinking of the Pacific region as just one of Small Island States, it can also be considered as one of **"Large Ocean States"**. This is an asset – not only is this region one with a high diversity of cultures and knowledge, a reservoir of biological resources with economic potential, making it a competitive arena for resource extraction and exploitation; but from a scientific point of view it also allows a variety of phenomenon to be observed and studied in 'real time' and 'real size'. Yet, it is also constraint as the population of each country is too small to individually address all of their own research and policy issues and needs.

In the context of growing geostrategic importance of the Pacific-European Union (EU) relationship recently underlined in the EU Communication *"Towards a renewed EU-Pacific development Partnership"*<sup>[1]</sup> (Brussels, 23.3.12), PACE-Net is a real opportunity for PICTs<sup>[2]</sup> and OCTs<sup>[3]</sup>. PACE-Net aims to facilitate cooperation around ST&I focal areas that support regional development goals, reinforcing regional research capacities and networks and better participating in bi-regional ST&I networks of global interest - such as the observation of climate change - and, finally, improving regional cooperation and integration, as encouraged by the Pacific Plan 2005-2015<sup>[4]</sup>.

### EU-PACIFIC COLLABORATION IN HORIZON 2020<sup>[5]</sup>

The next EU Framework Programme (Horizon 2020) particularly emphasizes that international cooperation in research and innovation will be encouraged to support the following objectives:

- Strengthening the European Union's excellence and attractiveness in research and innovation as well as

its economic and industrial competitiveness

- Tackling societal challenges,
- Supporting the European Union's external policies.

**Societal challenges** are global and comparable for all regions of the world even if in the Pacific region, some of them are exacerbated by the regional geographical and socio-economical particularities. In a context of economic challenges and extreme remoteness, the development of Science, Technology and Innovation (ST&I) is of high importance to Pacific peoples and can provide many opportunities for both European and Pacific researchers and innovators to collaborate. Thus, EU-Pacific ST&I collaboration can support the EU's research and innovation excellence and economic competitiveness, as well as support EU's external policies.

### BI-REGIONAL ST&I POLICY DIALOGUE AND THEMATIC POLICY BRIEFS

In order to achieve an intensified EU-Pacific ST&I collaboration, there is a strong need for reinforced cooperation and a strengthened bi-regional dialogue in ST&I. Addressing the lack of a structured forum for a **bi-regional ST&I policy dialogue**, PACE-Net established three bi-regional platforms, bringing together policy makers, funding agencies, and representatives from research institutions from EU, Pacific, as well as Australia and New Zealand.

Researchers in thematic areas considered as scientific priorities for both regions also participated in these platforms, enabling a high level policy dialogue between the EU and the Pacific region.

In this context, **thematic policy briefs** were produced: these important policy advice tools synthesise the outcomes of several specialists' workshops which are crucial for prioritisation of future research. PACE-Net's key stakeholders' priority recommendations how to tackle several societal challenges in Horizon 2020 are:

<sup>[1]</sup> <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:52012JC0006:EN:HTML> ■ <sup>[2]</sup> Pacific Islands Countries and Territories. ■ <sup>[3]</sup> Overseas Countries and Territories. ■ <sup>[4]</sup> [http://www.forumsec.org/resources/uploads/attachments/documents/Pacific\\_Plan\\_Nov\\_2007\\_version.pdf](http://www.forumsec.org/resources/uploads/attachments/documents/Pacific_Plan_Nov_2007_version.pdf) ■ <sup>[5]</sup> <http://ec.europa.eu/research/horizon2020/pdf/press/horizon2020-presentation.pdf>





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## PRIORITY RECOMMENDATIONS IN SEVERAL HORIZON 2020 SOCIETAL CHALLENGES...

### EU PRIORITIES [ Challenge 1 in Horizon 2020 ] HEALTH, DEMOGRAPHIC CHANGE AND WELLBEING

...the Joint Programming Initiatives, including “Neurodegenerative Disease Research”, “A Healthy Diet for a Healthy Life”, “Antimicrobial resistance” and “More Years, Better Lives” and the European Innovation Partnership on Active and Healthy Ageing.

#### PACIFIC PRIORITIES IN HEALTH

##### Pacific context

- The local populations and economies are too small to undertake the long-term, collaborative research necessary to inform their own evidence based health programs, in view of effective health planning in the region;
- Current (rheumatic heart disease, leptospirosis, dengue, food and water-borne diseases, HIV AIDS) and emerging **communicable diseases** (influenza, vector-borne viruses and antibiotic-resistant bacteria) pose a threat to the health and productivity of the local people, which they are ill-equipped to manage;
- Almost all communicable diseases threats in the Pacific are likely to be exacerbated by climate change and the effects are likely to vary from one island nation to the next so a single approach to this issue is unlikely to be appropriate for all locations;
- The extensive air links within the Pacific and between the Pacific and major Asian, American and European population centres allows the rapid movement and mixing of almost any pathogen able to infect humans;
- **Non-communicable diseases** (NCDs) due to westernised diets, lack of activity, alcohol and tobacco are having a significant impact on the health of Pacific Islanders. While these NCDs are the hallmark of poor and vulnerable groups in many societies, the social structures of Pacific societies provide an excellent framework to tackle these diseases.

##### Policy priorities

- It is unlikely that the health budgets of any Pacific Island nation state will ever be able to tackle these problems if the

causes go unchecked. Policy makers from all PICTs should share experiences and insights (also with EU experts);

- Policy makers should determine priorities for health research that will not be addressed by countries outside the Pacific;
- Policy makers should prepare a document making a case for external (EU) support for research in these areas.

##### Research, development and innovation priorities

- There is a need to **establish, train and sustain** a laboratory diagnostic capacity throughout the Pacific in order to provide comprehensive data which can be used to measure disease trends and to evaluate the effectiveness of any interventions;
- There is a need for **operational research** in the area of NCDs;
- All research proposals addressing the identified issues should provide clear roadmaps on how the research will contribute to local capacity building, to estimations of the burden of the disease being studied, to identification of environmental and societal drivers, to possible interventions and to the methodology for evaluating any interventions. Links with social sciences are also encouraged.

##### Actions

- Hold a meeting in the Pacific between local advocates for priority areas of health research (above) and 6-8 EU leaders in these areas e.g. President of the Robert Koch Institute, Director of the Pasteur Network, Head of the U.K. Health Protection Agency etc. to shape specific research plans and identify funding opportunities.

The complete Policy brief on **Health** that was produced in the framework of PACE-Net can be downloaded here:

- [http://brussels-conference.pacenet.eu/sites/default/files/PACE-NET\\_Policy\\_Briefno7\\_Health\\_1.pdf](http://brussels-conference.pacenet.eu/sites/default/files/PACE-NET_Policy_Briefno7_Health_1.pdf)



## PRIORITY RECOMMENDATIONS IN SEVERAL HORIZON 2020 SOCIETAL CHALLENGES...

### EU PRIORITIES [ Challenge 2 in Horizon 2020 ] EUROPEAN BIOECONOMY CHALLENGES: FOOD SECURITY, SUSTAINABLE AGRICULTURE AND FORESTRY, MARINE & MARITIME AND INLAND WATER RESEARCH

...the Joint Programming Initiatives, including “Agriculture, Food Security and Climate Change”, “A Healthy Diet for a Healthy Life” and “Healthy and Productive Seas and Oceans”) and the European Innovation Partnership ‘Agricultural Productivity and Sustainability’...

### PACIFIC PRIORITIES IN AGRICULTURE-FORESTRY

#### Pacific context

- Natural resources underpin economic growth, the livelihoods and cultural identity of Pacific people;
- Agriculture, forestry and fisheries have been vital in sustaining livelihoods of Pacific peoples;
- Agriculture and forestry products make particularly significant contributions to food security, employment, income and foreign exchange earnings in the Pacific.

#### Policy priorities

- Policy makers should develop a policy framework that addresses the vulnerabilities of the agricultural sector against global and climate change, integrates the appropriate environmental and socio-economic measures, and makes the necessary changes to adaptation and supporting policies;
- Policy makers should embark on an agricultural and forestry programme of research, development and innovation that would both inform and facilitate long-term policy development while at the same time produce results that would have an immediate impact on the management of the region and the communities;
- Policy makers should develop a synergistic relationship between policy and programme that would create a positive spiral of mutually supporting activities.

#### Research, development and innovation priorities

- Genetic resources & management: data base, resource conservation, exploitation & innovation adaptive management, development & innovation;
- Monitoring & compliance: methodology development, data collection, analysis & integration;
- Traditional knowledge & culture: data & social mapping, integrating traditional knowledge and land use practices;
- Cross cutting Issues: awareness & communication, database, monitoring & evaluation, implementation and adoption.

#### Actions

- Database building;
- Mapping of institutions & multi level stakeholders;
- Integrating traditional knowledge and scientists;
- Adaptive management, development & innovation;
- Biosecurity programme;
- Implementation of appropriate land use;
- Innovation on high added value crops.





## PRIORITY RECOMMENDATIONS IN SEVERAL HORIZON 2020 SOCIETAL CHALLENGES...

### PACIFIC PRIORITIES IN FISHERIES AND AQUACULTURE

#### Tuna (for economic development)

- Continued investment in stock assessment and good management to secure stocks for the future;
- Strategies to capitalise on opportunities to make larger catches in some countries likely to be created by climate change and to minimise the implications of reduced catches in other countries;
- Better modelling of future tuna catches in the face of climate change and alterations to fishing effort;
- Improved long term data collection from industrial fleets to build better models of future tuna distribution and abundance.

#### Coastal Fisheries (food security and livelihoods)

- Communication of risks to coastal fisheries production due to degradation of coral reefs;
- Raise awareness of emerging gap in fish supply for food security due to population growth and lower coastal fisheries production;
- Development of practical 'win win' adaptations for coastal communities to address the effects of population growth and climate change on fish availability;
- Support for monitoring of the effects of climate change on coastal fish habitats and stocks and the effectiveness of adaptations.

#### Actions

##### Cost effective data collection and modelling for tuna

- Expanding the number of global climate models and biogeochemical models used to inform the SEAPODYM model;
- Increasing the number of sensors of important physical and biogeochemical variables on existing platforms to validate models;

- Greater emphasis on the collection of data on the micronektonic food of tuna and validation of acoustic methods for collecting data on micronekton;
- Development of digital systems for assessing species composition and species length-frequency plots onboard industrial fishing vessels.

#### Win win adaptations for coastal communities

- Improving governance to implement integrated coastal zone management to safeguard coastal fish habitats and stocks;
- Expansion of community-based management based on 'primary fisheries management' and an ecosystem approach;
- Expanding use of inshore FADs and pond aquaculture to increase access to fish;
- Research to increase coastal aquaculture production and build resilience of enterprises to climate change.

#### Communication and matching adaptations to community needs

- Communication network and knowledge exchange to inform communities about the projected effects of climate change and appropriate adaptations;
- Training and capacity building to implement priority adaptations;
- Monitoring success of adaptations at community level.



## PRIORITY RECOMMENDATIONS IN SEVERAL HORIZON 2020 SOCIETAL CHALLENGES...

### PACIFIC PRIORITIES IN BIODIVERSITY AND ECOSYSTEMS MANAGEMENT

#### Biodiversity: H2020 headline target

Halting the loss of biodiversity and the degradation of ecosystem services and restoring them, while stepping up the EU contribution to averting global biodiversity loss. Reckon the economic value of biodiversity and the services it provides that is seldom captured in markets.

#### Pacific context

- Exceptional biodiversity (hot spot): more rare and endangered species per capita than anywhere else on earth. They are microcosms of our world, dramatically highlighting the interdependence of living species with land, freshwater, and marine environments;
- Also: ordinary biodiversity (cold spot) basis for livelihood.

#### Policy priorities

- Policy makers should craft adapted regulatory frameworks building up on context-specific knowledge (integrating scientific and local knowledge) and indicators on biodiversity;
- Protect biodiversity and manage competing uses of nature (implement large sustainable protected areas network for biodiversity conservation);
- Secure livelihood (for the current and future generations).

#### Research priorities

- Identify and study the drivers and consequences of environmental changes (invasive species, climate change, natural resources exploitation, etc.) (e.g. by setting up long term observatories and data banks on biodiversity, marine and terrestrial ecosystems);
- Develop models and tools for restoration of biodiversity modified by global change for sustainable uses and services.

The complete Policy brief on Biodiversity-Ecosystems management that was produced in the framework of PACE-Net can be downloaded here:

- [http://brussels-conference.pacenet.eu/sites/default/files/PACE-NET\\_Policy\\_Briefno6\\_Biodiversity.pdf\\_1.pdf](http://brussels-conference.pacenet.eu/sites/default/files/PACE-NET_Policy_Briefno6_Biodiversity.pdf_1.pdf)



## PRIORITY RECOMMENDATIONS IN SEVERAL HORIZON 2020 SOCIETAL CHALLENGES...

### EU PRIORITIES [ Challenge 5 in Horizon 2020 ]

#### CLIMATE ACTION, RESOURCE EFFICIENCY AND RAW MATERIALS

...These actions shall, when appropriate, interface with relevant European Innovation Partnerships and Joint Programming Initiatives...

### PACIFIC PRIORITIES IN FRESHWATER

#### Pacific context

- Wide diversity in water resources between large and small island countries, high and low island countries, as well as within countries;
- Access to and the availability of safe freshwater and appropriate sanitation is a continuing, highest priority concern for communities and industries;
- Frequent, severe ENSO-related droughts, floods, as well as major cyclones disrupt safe freshwater supplies;
- Population growth, increasing urbanisation and changed land use are increasingly impacting on freshwater supplies particularly in islands with limited land area;
- Water governance is generally poor and the capacity and resources available restrict their ability to respond to current challenges;
- Island communities have remarkable local strengths for form a strong basis for change.

#### Policy Priorities

- Development of national policy processes which recognise of the unique hydrogeological character, vulnerability to changes in atmosphere-ocean interactions and human-induced changes, of water resources and which build on the unique strengths of island communities;

- Improve water quality and maintain it as a viable , necessary resource;
- Building policies, laws and plans that based on knowledge of national water resources, their variability and the communities which rely on them;
- Constructing policies, laws and plans that promote resilience in the face of global change.

#### Research Priorities

- Improving access to safe and adequate supplies of water and sanitation especially during frequent ENSO-related droughts, floods and cyclones and in urban areas;
- Monitoring water quality;
- Decreasing tragically high preventable water-borne illnesses and deaths;
- Providing adequate water supplies for development;
- Impact of aquaculture on water quality and coastal areas;
- Decreasing heavy reliance on fossil fuels in water production, treatment and distribution systems;
- Decreasing the threats to sustainability and safety of water supplies from growing demand, development, urbanisation and land use changes;
- Strengthening governance and monitoring in the sector; and
- Increasing community participation.





## PRIORITY RECOMMENDATIONS IN SEVERAL HORIZON 2020 SOCIETAL CHALLENGES...

### PACIFIC PRIORITIES IN NATURAL HAZARDS

#### Pacific context

- Wide range of natural hazards impacting island countries – volcanic eruptions, earthquakes, tsunamis, island and coastal inundation, coastal erosion, cyclones, floods, landslides and droughts;
- Frequency of natural hazards and particularly those tied to ENSO events;
- Disproportionate impacts of natural hazards on small island countries;
- Sea level rise, principally affecting low countries.

#### Policy Priorities

- Inclusion of island-specific knowledge in disaster management policies, laws and regulations and plans;
- Incorporating expected global change in disaster management policies, laws and regulations and plans;
- Developing Disaster Management Plans which promote community resilience.

#### Research Priorities

- Understand climate variability and its influence on natural hazards such as sea level rise, tidal and storm surges, coastal erosion, cyclones, floods, landslides and droughts. Plus install widespread monitoring system;
- Improve physical and societal models for impact assessment of climate change related natural hazards:
  - to Identify communities already at risk,
  - to include model outputs in local Disaster Risk Management plans;
- Develop capacity building in the region:
  - to analyse and disseminate scientific information,
  - to Integrate traditional and historical knowledge and expertise,
  - to sustain and develop monitoring systems (e.g., coastal in-situ stations and ship time),
  - to train local people to support data collection and monitoring;
- Establish regional data centres in the Pacific;
- Educate and train local communities towards natural hazard adaptation;
- Connect with the global network of monitoring hazards for warning against earthquakes, tsunamis and cyclones, and make sure the warning system is rapid and efficient.



## PRIORITY RECOMMENDATIONS IN SEVERAL HORIZON 2020 SOCIETAL CHALLENGES

### EU PRIORITIES [ Challenge 3 in Horizon 2020 ] SECURE, CLEAN AND EFFICIENT ENERGY

(...) Reducing energy consumption and carbon footprint through smart and sustainable usage; Low-cost, low-carbon electricity supply; Alternative fuels and mobile energy sources; A single, smart European electricity grid; New knowledge and technologies; Robust decision making and public engagement; Market uptake of energy innovation, empowering markets and consumers (...)

#### PACIFIC PRIORITIES IN ENERGY

- Explore linkages between the lack of access to energy and other development indicators, including those of the MDGs (e.g. energy & gender, energy & health; and energy & water);
- Energy access as support of the overall sustainable development of the Pacific communities;
- Data centres on renewable energy (for the South Pacific) to help develop local solutions for energy access, knowledge of available resources.

### EU PRIORITIES [ Challenge 6 in Horizon 2020 ] INCLUSIVE, INNOVATIVE AND SECURE SOCIETIES

(...) It will interface, as and when appropriate, with Joint Programming Initiatives, including “Cultural Heritage”, “More Years, Better Lives” and “Urban Europe” and coordination with the Joint Research Centre direct actions will be pursued (...)

#### PACIFIC PRIORITIES IN INCLUSIVE, INNOVATIVE AND SECURE SOCIETIES

- Ensure healthy and clean resources (access to water, fish, crops) and genetic resources;
- Match the research to the communities;
- Develop practice in capacity-building (especially on how to make it effective);
- Highlight the importance of monitoring in all themes;
- Use and develop knowledge;
- Understand the importance of the use of models;
- Involve all stakeholders from the beginning of projects (taking into consideration the community needs; also the women);
- Develop use of ICTs, databases and all existing data (plus analyse the currency of the data).

These thematic issues are of vital importance for the populations of the South Pacific and the EU. They were developed by the experts in the workshops in the hope that they will be addressed, specifically by the institutional players in the region. The range of recommendations for enhancing the use of research in policy formulation have been discussed in-depth and enriched in situ by the approximately 120 delegates from about 17 countries and territories from the Pacific and from Europe who participated in our last conference in Suva, hosted at the University of South Pacific, Fiji (12-14 March 2013).



## 3

## STRATEGIC POLICY PRIORITIES

### Need for a strategic research and innovation agenda

- Public policy based on scientific evidence and linked to development policy;
- Address the specific needs/concerns of PICTs that do not have innovation/research systems;
- Research to contribute to the local economy and traditional Pacific culture;
- Benefit from knowledge sharing in biodiversity & other common fields;
- Thematic task forces to develop regional plans driven by national aspirations;
- Closer link between needs and available funding and needs of the Pacific;
- Need commitment to both long & short term objectives;
- Need aligned funding for ACP-OCT collaboration;
- Consider Horizon 2020 perspective in revised Pacific Plan;
- Identify and promote thematic areas of excellence.

### Need for Pan-Pacific Research Governance

- Raising awareness of research;
- Capacity building for south-south, and EU cooperation;
- Innovation can be organisational;
- Need for Pan-Pacific dialogue;
- Open access to Pacific research;
- Use Pacific Island Forum agenda to optimise dissemination and gather feedback from stakeholders;
- Use Pacific Island Forum agenda to optimise dissemination and gather feedback from stakeholders.

### Need for Systematic Capacity Building

- Use Horizon 2020 to achieve Pacific research priorities;
- Development of a National Contact Point (NCP) system.

## 4

## STRATEGIC ACTION PRIORITIES

### Immediate Actions

- Scientific evidence should contribute to the revised Pacific Plan (Pacific Island Forum);
- Wide dissemination of outcomes of the PACE-Net project to catalyse the development of national & regional research policy frameworks;
- Creation of regional thematic task forces for research coordination.

### Mid-term Actions

- Creation of a regional research authority;
- Encourage development of multidisciplinary research teams;
- Share Papua-New Guinea (and other) experience of use of indigenous knowledge and resources.



# PACE-NET SUBMITS A CONTRIBUTION TO THE PACIFIC PLAN REVIEW TEAM



The Pacific Plan for Regional Integration and Cooperation is the master strategy for strengthening regional cooperation and integration in the Pacific. It provides a high-level framework that guides the work of national governments, regional agencies and development partners in support of the aspirations of Forum Member countries and our people. It was designed as a ‘living document’ so that it can adapt to the changing landscape of Pacific regionalism. The Plan was endorsed by Forum Leaders at their annual meeting in Madang in October 2005. It has been reviewed once, in 2009, and now Leaders have decided it is time for the Plan to undergo another, more comprehensive, Review.

## Issue Addressed by PACE-Net Submission to the Pacific Plan Review:

The lack of recognition in the current 2005 Pacific Plan (modified in 2008) of the fundamental importance of science, technology and innovation in the sustainable development of Pacific island countries and the betterment of its peoples.

Pacific Island Nations face many complex and challenging problems in the sustainable development of their countries and vast maritime regions in the face of global change. Making wise decisions in addressing these problems requires a solid and reliable knowledge base. In many cases, particularly those connected with managing our unique natural resources and the impacts of global change on them, our knowledge base is inadequate. Despite this, the current Pacific Plan does not recognise the importance of increasing the knowledge base and capacity of the Pacific by investing in regionally appropriate science, technology, innovation (ST&I) and research and building capacity in them. The absence of an ST&I goal is also mirrored in the absence of ST&I policies in many Pacific island states. Without that goal and those policies, the Pacific is in sharp contrast to other regions in the world and gives the appearance of being unaware of the fundamental importance of ST&I to the future.

## Recommendations

It is recommended that the Pacific Plan includes the goals to:

- Invest in and develop appropriate science, technology and innovation to underpin the sustainable development and improved planning and management of the Pacific region and the betterment of its people in the face of global change;
- Increase regional capacity in relevant ST&I to better inform policy development, improved planning and management, augment development opportunities and improve adaptation to global change within the Pacific region.

As a strategy for achieving these goals, it is recommended that a task force from regional bodies including SPC, SPREP, Pacific Islands University Regional Network, the Pacific Science Association, research organisations within the region, as well as bi-regional and international agencies and aid donors be established to build on the thematic priorities already identified in PACE-Net and elsewhere. Based on the established priorities, the task force will develop short and long term priorities in ST&I relevant to the sustainable development and improved planning and management in the Pacific and strategies to address these priorities and increase regional ST&I capacity. It is recommended that this task force also identify funding opportunities to support ST&I priority strategies and capacity building and develop mechanisms for monitoring ST&I progress.

## Planned Outcomes

Planned outcomes resulting from the recommended ST&I goals are:

- Improved knowledge-based policies for the sustainable development of the region;
- Improved planning, management and use of the vast ecosystems and invaluable natural resources within the region;
- Increased capacity and training in ST&I;
- Improved resilience in adapting to global change;
- Increased development opportunities;
- Augmented opportunities for funding soundly-based development proposals;
- Improved health within the region;
- Improved agricultural, forestry, aqua-cultural and fisheries productivity;
- Enhanced use of renewable energy;
- Improved ability to cope with natural hazards;
- Improved communications.

## Concluding Commitment

PACE-Net and its successor PACE-Net+ recognise both the critical importance of the Pacific region to global sustainability and the vulnerability of its island countries. We are committed to strengthening the regional dialogue and planning on ST&I between Europe and the Pacific on global and regional priorities of mutual importance and to increasing capacity and opportunities. Our aim is to assist the region and especially those small island countries with very limited ST&I capacity to achieve the goals recommended above. We are dedicated to assisting the Pacific community in achieving its full potential in ST&I and in achieving the sustainable development, planning and management of this globally critical region to the betterment of its peoples.

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