



Global Meets Regional

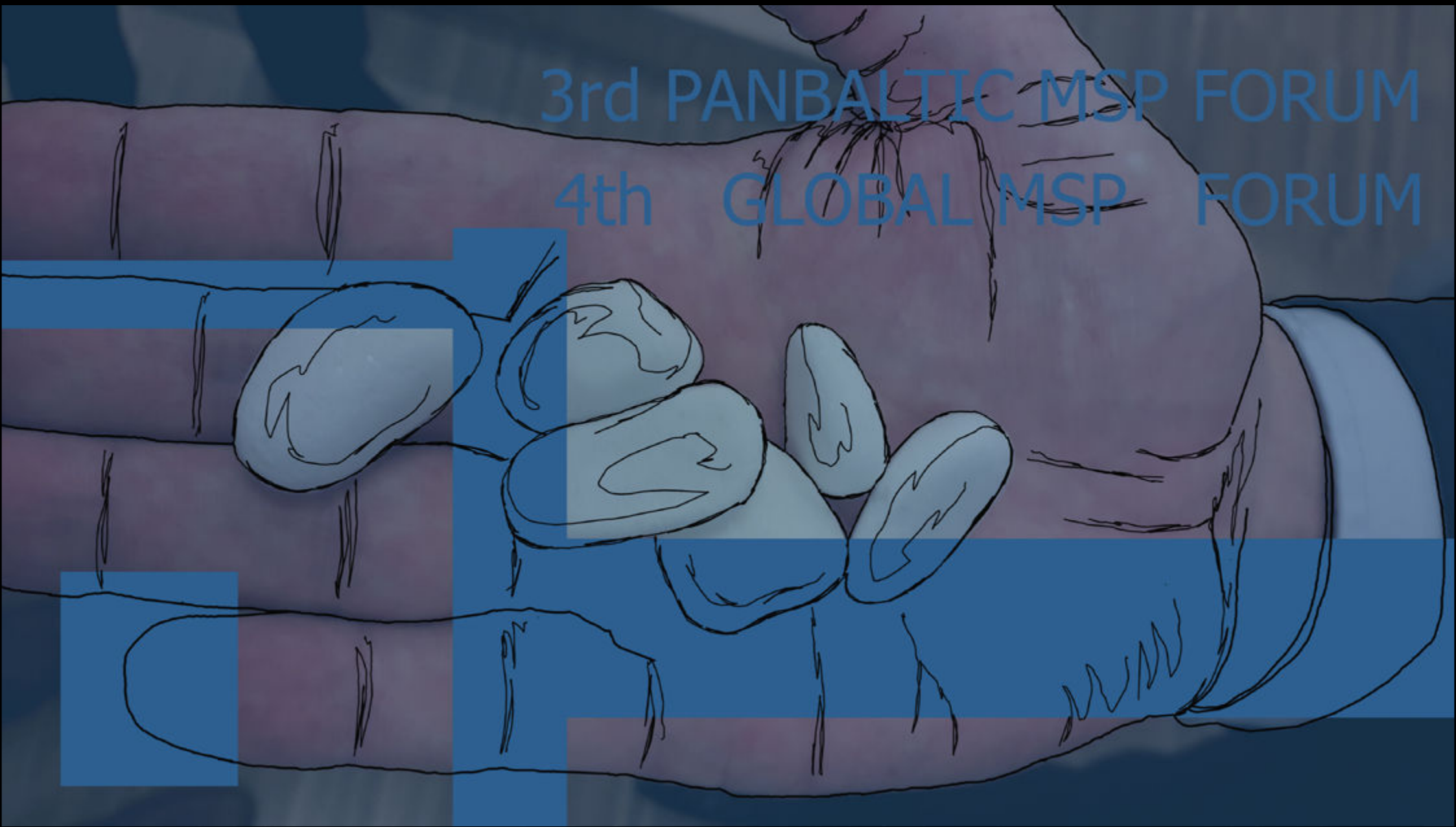
19-21 November 2019
Riga, Latvia

Postcards

An infographic report by Folco Soffietti

3rd PANBALTIC MSP FORUM

4th GLOBAL MSP FORUM



THE OCEAN AND CRYOSPHERE IN A CHANGING CLIMATE



IT SHOULD BE NEUTRAL!

WHAT
IPCC DOES?

INTERGOVERNMENTAL PANEL ON CLIMATE CHANGE

ASSESS

SCIENTIFIC

SOCIO-ECONOMIC

TECHNICAL



MMM... THIS GIANT SOUP IS EXQUISITE!

CONSEQUENCES ARE SEVERE

THE OCEAN HAS ACTED AS A SPONGE ABSORBING CO₂ AND HEAT BUT CANNOT KEEP UP WITH INDUSTRIAL RATES!!!



❑ LOSS OF PERMAFROST

HI, WE ARE 2000 YEARS OLD BACTERIA

UP TO 70% BY 2100



❑ SMALLER GLACIERS

UP TO -80% BY 2100

❑ WATER AVAILABILITY



❑ EXTREME SEA RELATED EVENTS



❑ FLOODINGS

❑ SEA LEVEL RISING



WHERE IS MY FOOD?

❑ REDUCED MIXING IN LAYERS " LESS NUTRIENTS

WHERE IS MY FOOD?



IT'S HARDER AND HARDER TO CREATE A SHELL

WHERE IS MY FOOD?



❑ WATER ACIDITY ISSUES

AM I MUTATING INTO A JELLYFISH ???

UN DECADE FOR SUSTAINABLE DEVELOPMENT 2021-2030

OCEAN SCIENCE TO HELP POLITICAL CHOICES

OCEAN IS DECLINING

WHY A DECADE??



NEED FOR ACTION



THE VISION :

DEVELOPMENT

- PLANS
- KNOWLEDGE
- COMMUNICATION

⑤ TRANSFORM
KNOWLEDGE
SYSTEMS



← HOW
TO?
↓ ↓

④ MEASURE CUMULATIVE
IMPACTS



③ REDUCE VULNERABILITY
OF COASTAL HABITATS



② BOOST OCEAN OBSERVING
+ DATA SYSTEMS

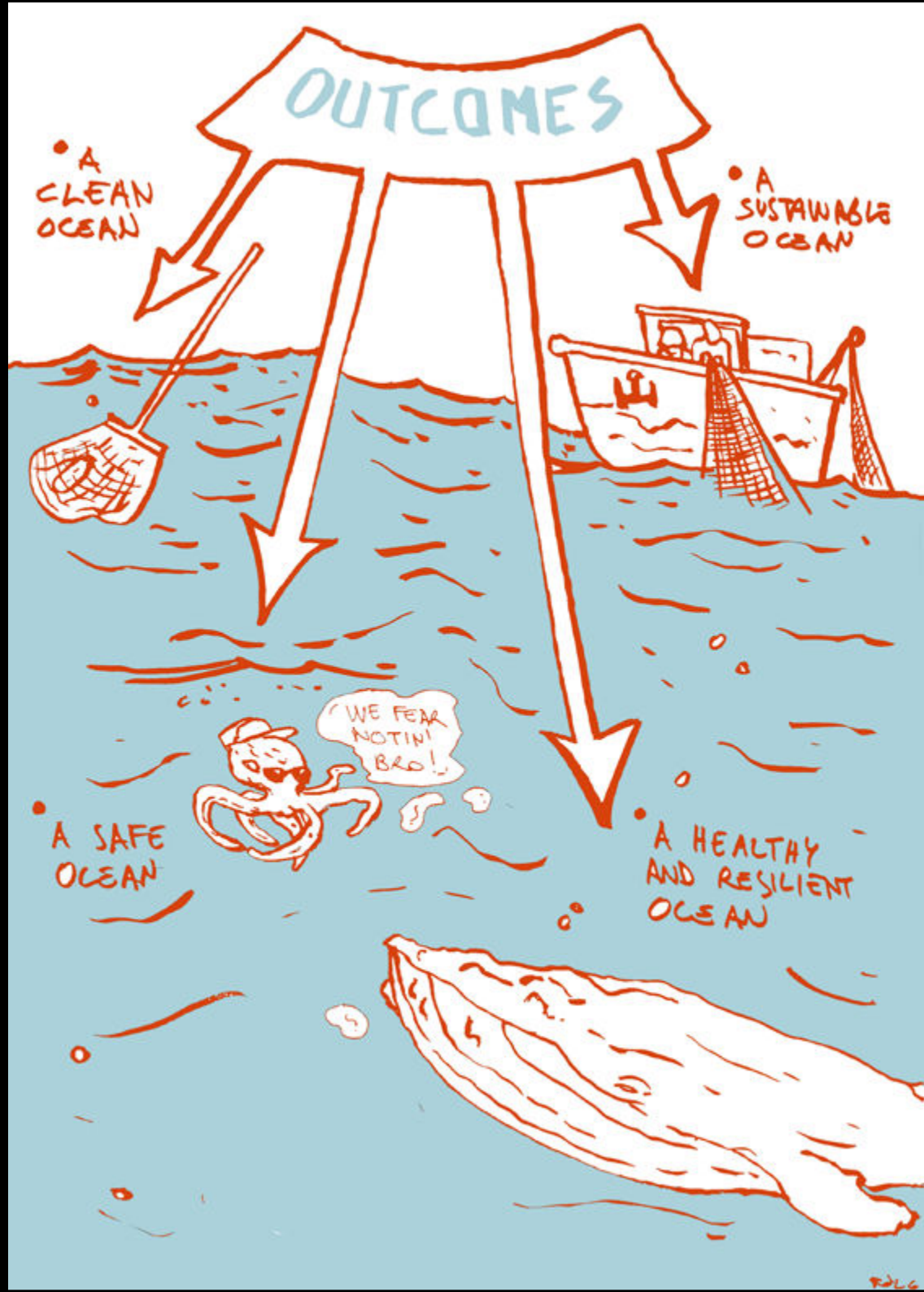


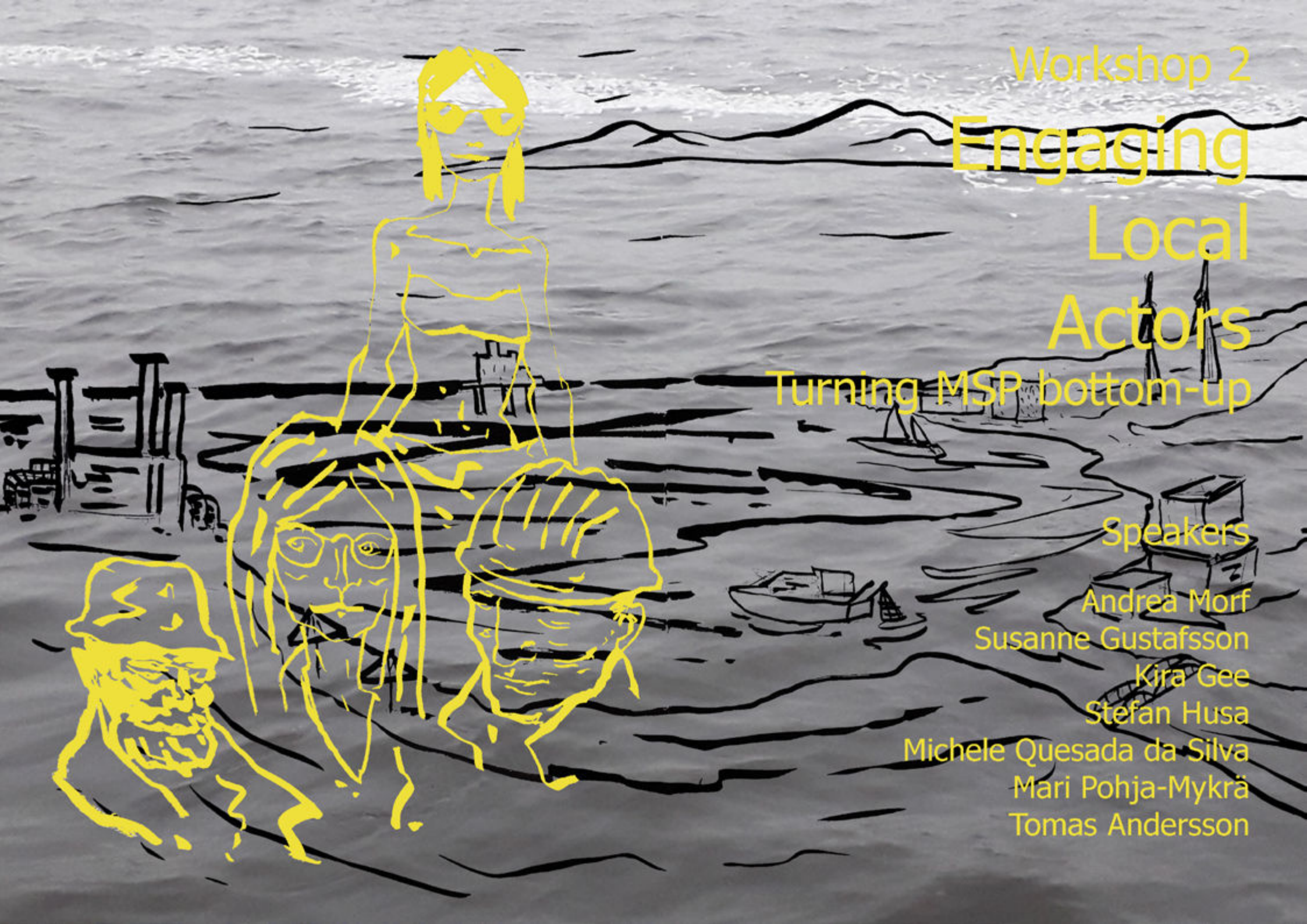
PRIORITIZING



DELIVER
BEST AVAILABLE
KNOWLEDGE
TO DECISION-
MAKERS.







Workshop 2

Engaging Local Actors

Turning MSP bottom-up

Speakers

Andrea Morf

Susanne Gustafsson

Kira Gee

Stefan Husa

Michele Quesada da Silva

Mari Pohja-Mykrä

Tomas Andersson

WORKSHOP
N° 2

WHAT IS NEEDED TO EFFICIENTLY TURN **MSP** BOTTOM-UP?

ENGAGING
LOCAL ACTORS:
TURNING **MSP** BOTTOM-UP
TITLE:



DECISION
MAKING

AND WHEN (OR WHAT IF)
TOP-DOWN DIRECTION
IS STILL NEEDED?



INFORMED
CITIZENS



THE INVOLVEMENT OF
LOCAL STAKEHOLDERS
CAN HAPPEN
ON DIFFERENT LEVELS:
INTERNATIONAL
NATIONAL
REGIONAL
LOCAL

CASE

IN THE GULF
OF BOTHNIA
FOR EXAMPLE

THERE
ARE
DIFFERENT
LEGISLATIONS



THEY HAVE BEEN THERE FOR AGES, WELL BEFORE MSP!



DO LOCAL STAKEHOLDERS TRUST PLANNERS?



BUT MSP RESEARCH DATA SHOWS OVERLAPPING AND CONFLICTS (PRESENT AND FUTURE)



ASK THEM TO SHOW THE ACTUAL SEA USE



THE RESULTS ARE MORE ACCURATE WHEN BOTH ARE THERE!



WAYS OF IMPROVING



+ DATA
+ INCLUSION

BUT

Who??



SHOULD BE INCLUDED???



P.S. ONLINE CONNECTIONS NOW ALLOW LONG-DISTANCE PARTNERSHIP

IN THE END

ENABLERS:
COLLABORATION = UNDERSTANDING OTHERS' PLANS!!!
+ LEARNING FROM OTHERS
(MISTAKES TOO!!!)

VS

CHALLENGES
CROSS BORDER COORDINATION + TIME IS ESSENTIAL!
(TAKE THE TIME TO HAVE A COFFEE WITH STAKEHOLDERS)
+ DIFFICULTY IN MOTIVATING LONG-TIME STAKE HOLDERS
(WHY SHOULD THEY CHANGE?)" TELL THEM!

CASE

FISHING GROUND IN COMMON



A PILOT CASE:

PERU AND EQUADOR
GULF OF GUAYAQUIL



• TRAINING



• THEORY

• PRACTICE



• NATIONAL PERSPECTIVE



OBJECTIVES

- ENHANCE PRE-PLANNING
- GOOD, BALANCED EXPLOITATION

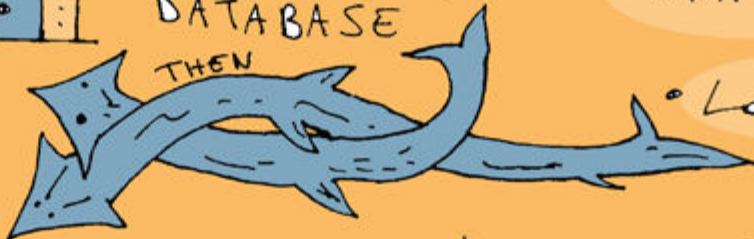


F2C

HOW TO MAKE TOP-DOWN STRUCTURE AND RESIDENTS INTERACT?



CREATE A STAKEHOLDER DATABASE THEN



A CASE ON 4 LEVELS

• GLOBAL



• CROSS-BORDER



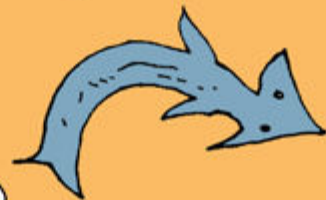
• NATIONAL



• LOCAL



AND IMPROVE PARTICIPATION



SO EVENTUALLY INFORMATION FLOWS

DIALOGUE

KNOWLEDGE EXCHANGE



MAIN CHALLENGES

COMMUNICATION

▷ REPRESENTATIVENESS

▷ EXPECTATIONS

WILL YOU MARRY ME?

UNCERTAINTY
RECEPTION
TOP-BOTTOM

TAP TAP

POLITICAL CRISIS

MAIN ENABLERS

A STRONG NETWORK

SNOWBALL STRATEGY

GOVERNMENTS SEEM TO WANT TO WIDE PARTICIPATION

TRANSPARENCY
- OBJECTIVES
- OUTCOMES

WE ARE THE PEOPLE ...

CITIZENS WANT TO PARTICIPATE

PANEL DISCUSSION

TOPIC 1

LOCAL KNOWLEDGE
IS CRUCIAL
FOR REGIONAL
AND NATIONAL
LEVEL PLANNING



WE LIVE HERE!

HOW TO INCLUDE LOCAL KNOWLEDGE?
FOR WHAT PURPOSES IS IT MOST VALUABLE?

AGREEMENT EXPRESSED WITH A TRAFFIC-LIGHT CARDS METHOD



WHEN I WAS YOUNG THERE WERE ONLY WOODS

IT IS DIFFICULT TO HAVE A STRAIGHTFORWARD ANSWER

IT DEPENDS

NOT ALWAYS SCIENTIFICALLY ACCURATE
NOT ALWAYS REPLICABLE ELSEWHERE



TOPIC 2

HOW TO DEAL WITH PARTICIPANTS EXPECTATIONS AND BALANCE INCLUSION WITH TRANSPARENCY?

EXPECTATIONS FROM PARTICIPANTS FLUENCING MSP ARE PROBLEMATIC



WILL I BE ABLE TO RIDE WHALES?

IT IS IMPORTANT TO BE VERY **CLEAR** FROM THE BEGINNING OR THE **TRUST** WILL FADE



CONTEXT MATTERS!!!

TOPIC 3

HOW TO WORK AROUND LIMITATIONS IN MANDATE AND RESOURCES?

"THERE ARE GOOD EXAMPLES OF HOW TO WORK AROUND LIMITATION IN MANDATE AND RESOURCES IN MSP"

LEGAL LIMITATIONS CAN BE ADDRESSED WHILE

LACK OF RESOURCES IS MORE DIFFICULT TO MANAGE

ADAPTATION CAN BE A KEY WORD

AUDIENCE IS DIVIDED

BUT

NEEDS AND WAYS FORWARD

ENABLERS

CHALLENGES

• TIME, PATIENCE EFFORT



WHY WE'RE STUCK?

P.S. BE CAREFUL NOT TO MAKE POWERFUL STAKEHOLDERS TOO POWERFUL

• TIME EFFORT PATIENCE



• TRUST TO COLLECT LOCAL KNOWLEDGE



• TRANSPARENCY



• DIFFICULT TO MOTIVATE WHY STAKEHOLDERS SHOULD ATTEND NEW MSP NETWORKS

EM...



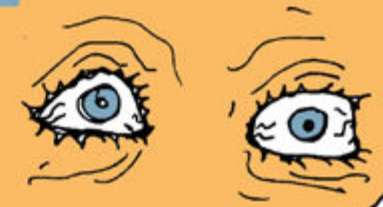
I OWN YOU!



LISTENING



COMMUNICATION



CAPACITY BUILDING



STAKE HOLDERS FEELING
THEY ARE LISTENED TO

WORDS RESULTS
(HOW TO TURN MSP MORE BOTTOM-UP?)

The background is a photograph of a tram on a street. A red architectural drawing of a tower is overlaid on the left side. Black wavy lines are drawn across the image, suggesting water or a flood. The tram is blue and white, and the street has overhead power lines.

Workshop 5 MSP for Resilient Coastal Metropolises

Speakers

Niccolò Bassan
Justine Pantelejeva
Yolanda Molares
Catarina Frazão Santos
Mohammed I Elsayed

CASE 1

LESSONS LEARNT FROM VIGO

• IMPROVING LIFE QUALITY OF PEOPLE LIVING IN COASTAL AREA



- VALUE → ECONOMIC
- SOCIAL INCLUSION
- ENVIRONMENT



SUSTAINABLE DEVELOPMENT

BLUE GROWTH



IN VIGO (ES) → 400,000 PEOPLE

MANY LIVING ON MARINE ACTIVITIES

BUT ALSO MECHANICAL MANUFACTURES

ECONOMIC ACTIVITIES



TRYING TO INTEGRATE LOCAL STAKEHOLDERS

ADMINISTRATIONS



INNOVATION SYSTEM



CITIZENS



COMMUNICATIVE SYSTEM



OBJECTIVES

A

P

O

R

T

STRATEGIES

HOW TO?

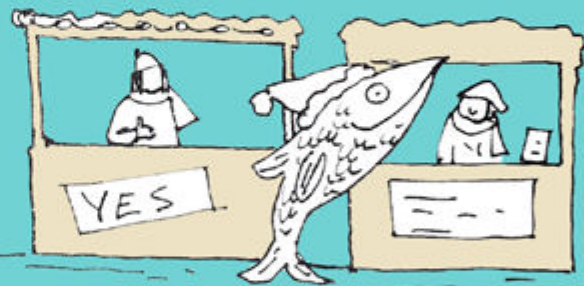
- SEA BOTTOM REGENERATION



- CO₂ MITIGATION



- PORT CHRISTMAS MARKET



CONNECTED



INNOVATIVE



GREEN



INCLUSIVE

REINFORCE THE RELATIONSHIP WITH

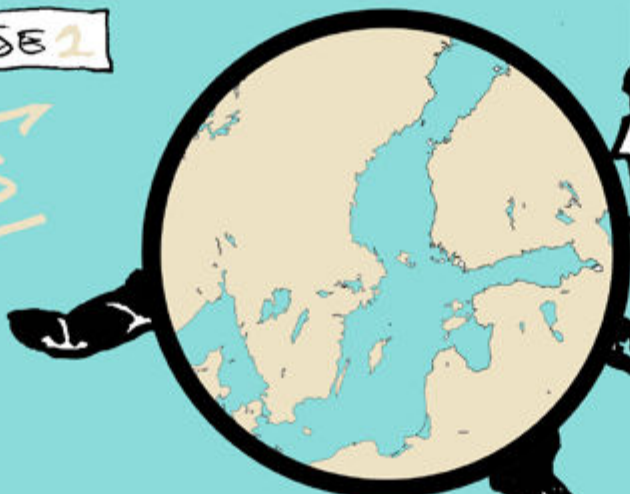
STAKEHOLDERS



CASE 2

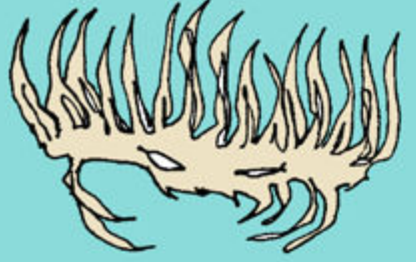
CHALLENGES

BALTIC-SEA SITUATION



MSP IN METROPOLITAN AREAS IN THE BALTIC HISTORIC REVIEW

⚡ EUTROPHICATION



⚡ OVERFISHING



⚡ CLIMATE EMERGENCY



⚡ LAND-BASED POLLUTION



OPPORTUNITIES

♥ CO-OPERATION

VS

REGIONAL COMPETITION ⚡♥



♥ BETTER SEA QUALITY

= + ECONOMY



♥ FIGHT CLIMATE CHANGE



NOW LET'S SEE SOME EXAMPLES OF CITIES IN THE REGION



HELSINKI

THEY CHOSE
③ GOALS

- ATTRACTIVE, FUNCTIONAL TOWN +
- MARITIME SERVICES RECREATIONAL POSSIBILITIES
- TREASURE + SEA NATURE



GOTHENBURG

THEY WANTED TO

- DEVELOP THE AREA THANKS TO NATURE (IMPROVING + MANAGING)
- SUSTAINABLE INDUSTRIES
- A RECREATIONAL ARCHIPELAGO
- SUSTAINABLE AGRICULTURE



OSLO

THEIR APPROACH

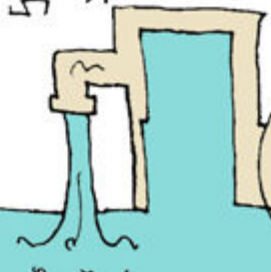
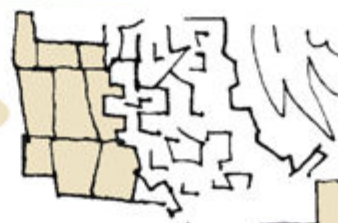
- TACKLING PLASTIC WASTE
- CONSUMPTION / ENVIRONMENTAL MANAGEMENT
- MICRO / NANO PLASTIC



EAT ME, OR PLAY WITH LEGS IN THE BELLY

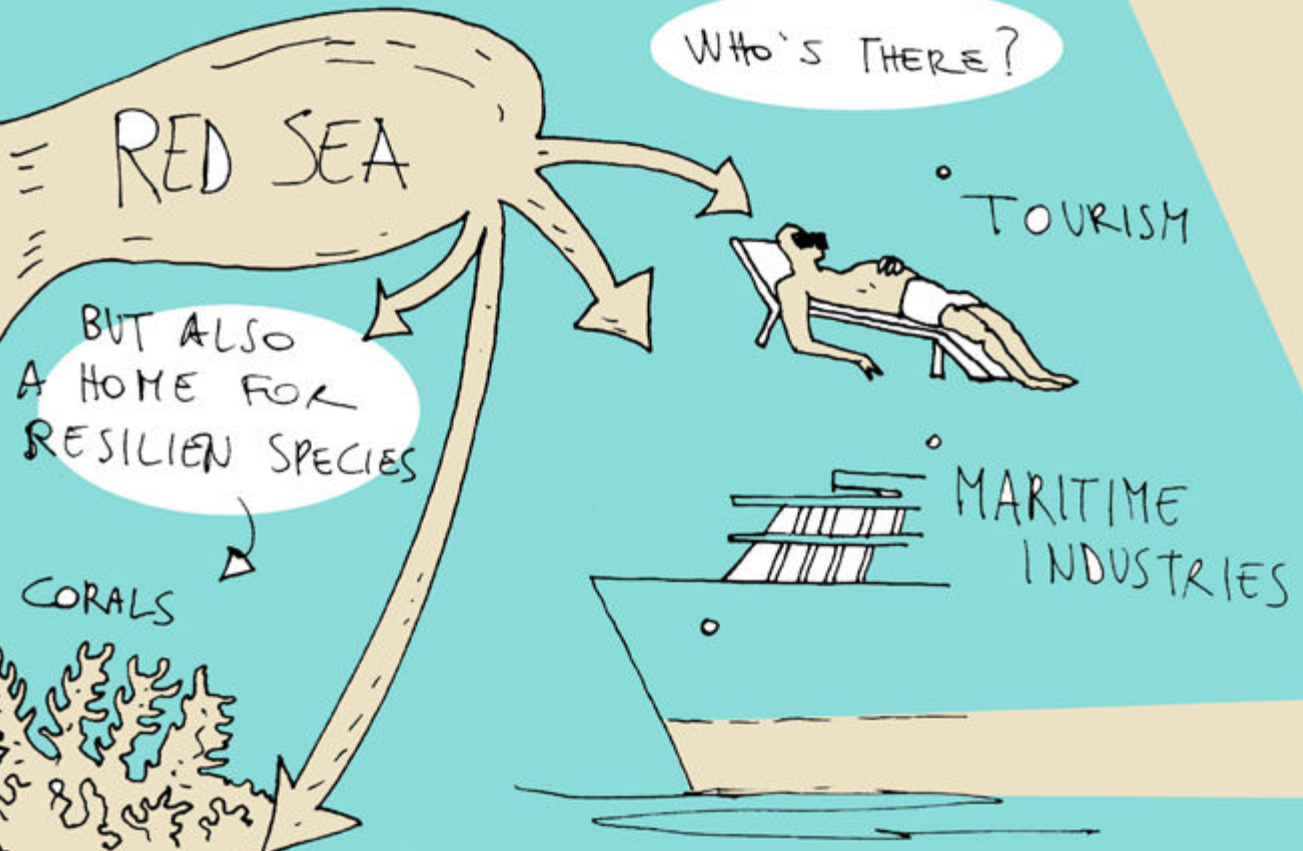
CHALLENGES TO TACKLE:

- FRAGMENTED INSTITUTIONAL COOPERATION
- LAND USE
- SUSTAINABLE WATER USE



RIGA

CASE 3



AN EXAMPLE:

DOLPHINS



- HARRASSED BY EXCESSIVE TOURISM FOOTPRINT



RESTRICTIONS TO PRESERVE

I.E.



SACKETS TO PREVENT DIVING BUT ALLOWING SNORKELING

IN THIS WAY JOBS ARE ALSO PRESERVED

LOT OF MONEY



SO PEOPLE ARE HAPPY

DOLPHINS ARE SAFE



BEWARE

ATTENTION READER:

NOW PLANNERS HAVE DIVIDED INTO GROUPS

QUESTIONS TO DISCUSS

1

EXISTING PRACTICES FOR INTEGRATING

MSP

URBAN PLANNING



2

HOW CAN MSP CONTRIBUTE TO BUILD RESILIENT METROPOLISES AND SUSTAINABLE MUNICIPALITIES?

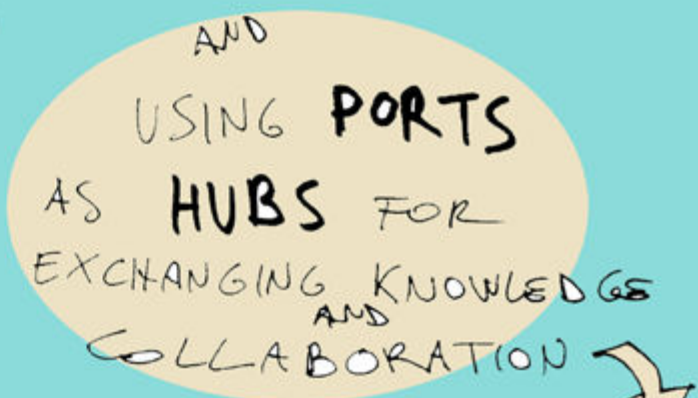
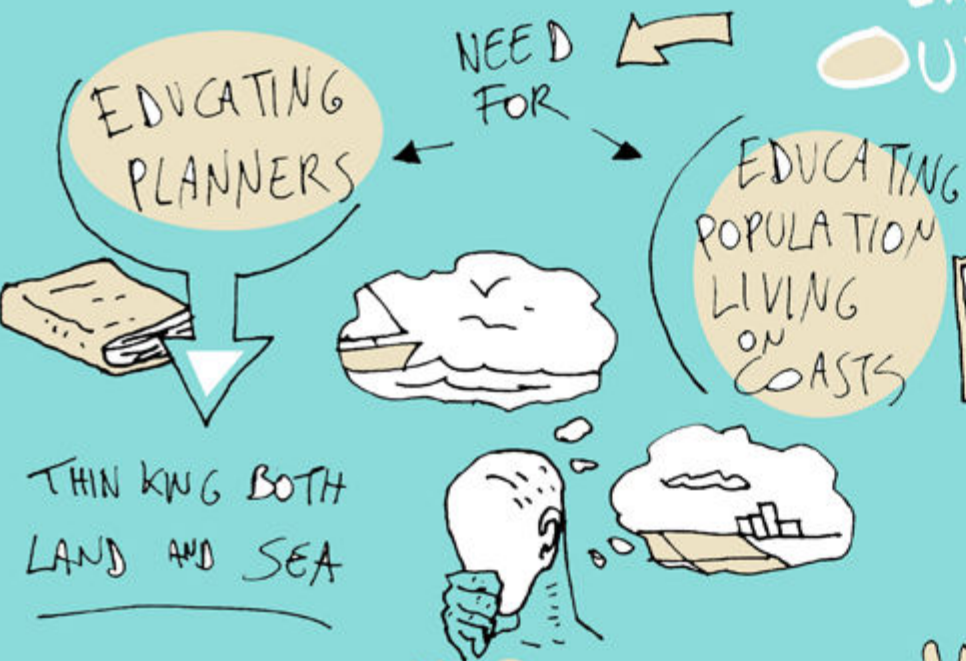
3

PRACTICAL STEPS TO IMPROVE MSP AND COASTAL PLANNING?

HOW IMPROVING COLLABORATION CAN HELP?



EXPECTED OUTCOMES:



STAKEHOLDERS INVOLVEMENT

IMPLEMENT CLIMATE CHANGE ADAPTATIONS

HOW MSP CAN HELP:

- ✓ REDUCE ENVIRONMENT CONFLICTS
 - ✓ SUPPORT COLLABORATION + BALANCE INTERESTS
 - ✓ ENHANCE DEVELOPMENT
 - ENERGY
 - FOOD
 - RECREATION
- SEA + URBAN + RURAL
-

PRACTICAL STEPS

- GATHERING URBAN AND MARINE PLANNING
 - BUILD COMMUNICATION CHANNELS AMONG PLANNING AUTHORITIES
 - PROMOTE CAPACITY BUILDING + EXCHANGE
 - INTEGRATE URBAN AND MSP PLANNERS
 - LOCAL LEVEL
 - NATIONAL LEVEL
-

Workshop 8

Marine Green Infrastructure and Its Role in MSP and Climate Refugia

Speakers

Janica Borg
Lena Bergström
Magdalena Matczak
Pierpaolo Campostrini
Juris Aigars
Sandijs Semjonovs

Anda Ruskule
Didzis Ustup
Solvita Strāķe
Jan Schmidtbauer Crona
Oscar Thörnqvist
Cristina Cervera Núñez

*The quoted maps were presented during the workshop by Anda Ruskule and Oscar Thörnqvist.

 **EU STRATEGY**
 BY 2020
 RESTORE AT LEAST
 15% OF DEGRADED ECOSYSTEMS

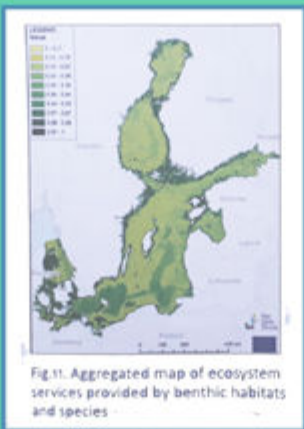
MARINE GREEN INFRASTRUCTURE (G.I.)

EU DEFINITION: A NETWORK OF NATURAL AND SEMI-NATURAL AREAS CAREFULLY PLANNED AND MANAGED TO DELIVER ECOSYSTEMS SERVICES

CASE 1
 IN PAN-BALTIC SCOPE APPROACH IT IS:

A NETWORK OF MARINE PROTECTED AREAS + ECOLOGICALLY OR BIOLOGICALLY SIGNIFICANT AREAS + IMPORTANT AREAS FOR CONSERVATION

AN INTRODUCTION TO PAN-BALTIC MAPPING AND DATA GATHERING



G.I. IS VERY USEFUL:
 - ASSESS DATA
 - IMPROVE KNOWLEDGE
 - SUPPORT COORDINATION



P.S. NO MAMMALS MAPPING AT THIS DAY.

SPAWNING AREAS AND RECRUITMENT AREAS



G.I. IS HERE!

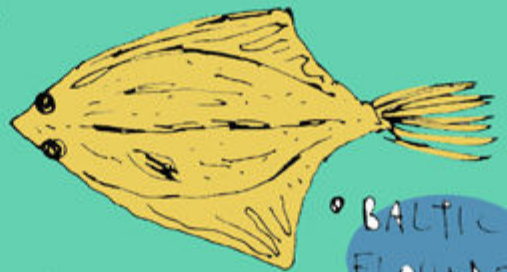
AGGREGATING MAPS FOR

WITH FISH MAPPING (ECOLOGICALLY RELEVANT SPECIES) MAP THEIR HABITATS

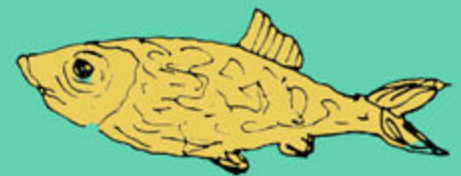
DEFINE THE G.I.



• COD



• BALTIC FLOUNDER



• HERRING



DATA AVAILABLE: 30 CONSERVATION COMPONENTS

NOT ALL DATA WERE RELATED

NEED FOR COMMON MAPS / AND LOW APPROACHES!

FOCUS ON BENTHIC HABITATS IN MPA

• ECOSYSTEM → COMPONENTS

• EXAMPLES:

MUSSELS

SERVICES

GREEN ALGAE

RED BROWN ALGAE

WERE IDENTIFIED MORE THAN 20 BENTHIC HABITATS

IMPLEMENTING SOCIO-ECONOMIC ASPECTS

BONUS BASHMATI CASE

A LATVIAN CASE

KEY MESSAGES:

- MOST RECENT DATA SHOULD BE USED FOR MAPS



- BENTHIC HABITATS ARE OF HIGH IMPORTANCE

- WITH MORE DATA

⇓
GI MAPPING AREAS CAN BE EXPANDED AND EVEN CONNECTED

VIA DIAGRAMS DATA WERE COMBINED:
REVEALING THE COMPLEXITY OF ECOLOGICAL SERVICES!

EVENTUALLY ADDING THE SPATIAL DIMENSION



DOES MPA SYSTEM NEED BOOSTING?

G.I. CAN BE A BOOSTER!

WITHOUT IT

✗ WE WON'T BE FED



THAT'S ALL IT'S LEFT SUR

✗ WORLD WILL BE DEAD



WORST CASE SCENARIO

IT'S IMPORTANT FOR LIFE

AND MSP GOAL IS TO CONTRIBUTE TO GOOD ENVIRONMENT!

IN SWEDEN IT STARTED IN 2012

NOT ONLY LARGE MPA'S BUT ALSO SMALL ONES!



MARINE G.I. IN SWEDISH MSP



HOW TO BOOST MPA-SYSTEM?

MOST EFFICIENT WITH SPECIFIC ECOLOGICAL OBJECTIVES!

INCREASE MPA'S

KEY MESSAGES

MSP SHOULD CONTRIBUTE IN ENVIRONMENTAL MANAGEMENT

MSP CAN IDENTIFY AREAS TO BE PROTECTED



- THANKS TO GI MAPS!!!

CLIMATE REFUGIA SHOULD BE PART OF G.I.

WHERE IN SWEDISH AREAS?

GULF OF BOTHNIA

BALTIC SEA

SKAGERRAK AND KATTEGAT



MODELS OF THE FUTURE

IN THE BALTIC

ASSESSING FUTURE GI BY MODELING CLIMATE REFUGIA

SCENARIOS IF TEMPERATURE INCREASES:

BY 2100

REGARDING

- HEAT
- ACIDITY
- SALINITY

+2,5° +4,5° >4,5

MORE PLAUSIBLE

KEY FOUNDATION SPECIES TAKEN IN ACCOUNT

- FOCUS
- ZOSTERA MARINA
- MYTILUS EDULIS
- STUCKENIA PECTINATA

MODELED CONSIDERING RESILIENCE AND INTERACTIONS

MODEL ACCURACY > 90%

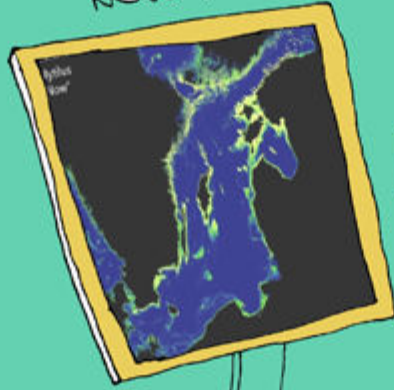
17 ECOLOGICAL VARIABLES INSERTED

THE MYTILUS

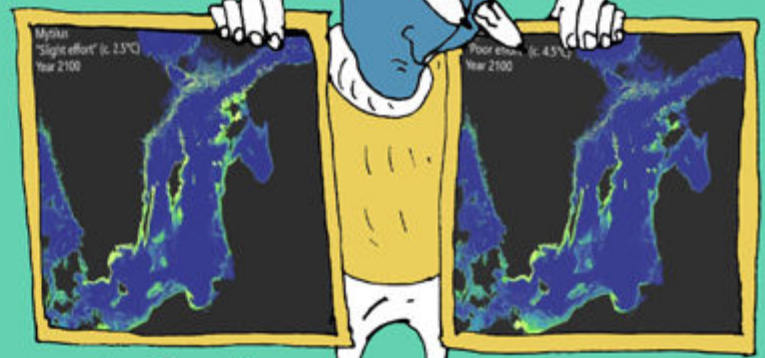


EXAMPLE:

PRESENCE NOW:



PRESENCE IN 2100



+2,5°

+4-5°

PANEL DISCUSSION

• WHAT IS GI GOOD FOR? SHOULD IT BECOME COMMON IN MSP?

▶ WE SHOULD USE BETTER BEFORE NEEDING MPAs!!!



▶ PLANNING FOR THE FUTURE!

▶ CAN BE USED WITH OTHER APPROACHES



▶ GI IS GOOD FOR REALLY ECOSYSTEM-BASED MSP + DEFINE ECOLOGICAL VALUE!



▶ KNOWING WHERE NOT STRESS NATURE

• WHAT ARE CURRENT LIMITATIONS OR REASONS NOT TO MAP MARINE GI?

▶ LACK OF DATA



(QUALITY/QUANTITY)

WE LIMITATE OURSELVES: FANTASY LIMITATION: WHY MPAs CANNOT BECOME AN ECOLOGICAL UNICUM?



▶ THE CONCEPT IS STILL NEW, USE OF WORDS CONFUSING.



• WHAT ACTIONS CAN BE TAKEN TO SUPPORT GI INTEGRATION IN MSP?

- NATIONAL AND INTERNATIONAL?

▶ CONTENT SEEMS VERY GOOD BUT PACKAGING IS CONFUSING



▶ IMPLEMENT IT FROM THE BEGINNING AND GO ECOSYSTEM-BASED

▶ EDUCATE MSP PLANNERS!



▶ REVISE COMMUNICATION!



Workshop 12

Ocean Literacy and MSP

Common Objectives and Challenges

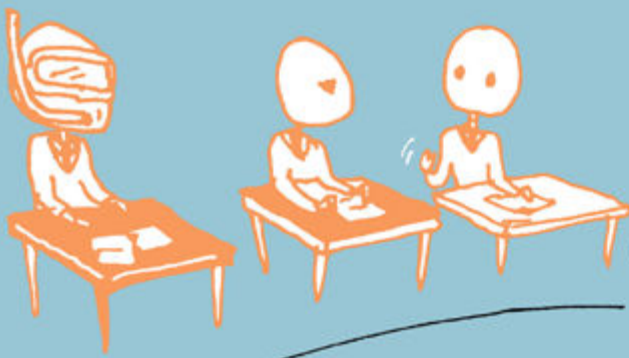
Speaker
Francesca Santoro



#OLCA

OCEAN LITERACY (O.L.)

IN THE LATE '90S IT STARTED IN THE U.S.



FELT A NEED FOR A GROUP OF SPECIALISTS AND EDUCATORS



IMPROVING OCEAN KNOWLEDGE IN U.S. EDUCATION SYSTEM



ACTION IN ONE PLACE

EFFECTS EVERYWHERE

WHAT IS IT ABOUT?

KNOWING THE IMPORTANCE OF THE OCEAN

- HEAT ABSORBER
- NUTRIENTS
- CO₂ ABSORBER
- O₂ PRODUCTION
- BIODIVERSITY

KNOWING HOW TO COMMUNICATE OCEAN

BRING PEOPLE TO UNDERSTAND OCEAN



ACTION

SO THEY CAN ACT FOR THE OCEAN

IMPLEMENTING COLLABORATION WITH COMMUNICATION SPECIALISTS



IF PEOPLE ARE AWARE

MMH... MAYBE I SHOULD EAT LESS MEAT.

AH-AH NOW I KNOW!

THEY CAN TAKE GOOD DECISIONS

EMPOWER PEOPLE

AND THEY WILL AND CAN CONTRIBUTE TO AN OVERALL GOOD



SO...

HOW WE USE SCIENTIFIC KNOWLEDGE?

THE UN DECADE

2021-2030

OCEAN SCIENCE FOR SUSTAINABLE DEVELOPMENT

SHARE IT WITH ALL THE STAKE HOLDERS

AN IMPORTANT QUESTION!

SOME PRACTICAL WAYS:

ALTERNATIVE EDUCATIONAL TOOLS:

GAMES



INFOGRAPHICS



VIDEOS



CHANGE BEHAVIOURS

(THINK OF SMOKERS: THEY KNOW IT'S BAD BUT THEY KEEP DOING IT!)



WORK WITH SOCIAL SCIENTISTS



PROGRESS FOR SOCIETY!

QUESTIONS FOR THE WORKSHOP

▲ WHAT ARE THE **O.L.** TOOLS, APPROACHES AND MECHANISMS THAT CAN BE USED IN **MSP?**



▲ WHAT ARE KEY AREAS OF **COLLABORATION** BETWEEN **O.L.** AND **MSP???**



▲ HOW CAN OCEAN LITERACY BE USED TO ENHANCE MULTI-STAKEHOLDER PROCESSES IN OCEAN **GOVERNANCE?**



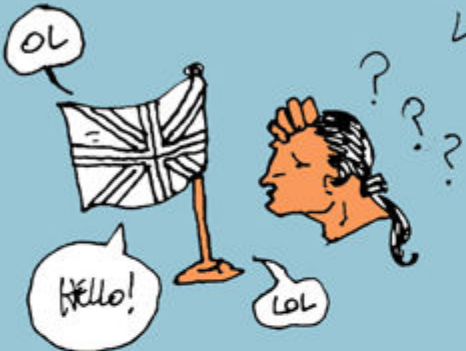
▲ HOW **O.L.** AND **MSP** COMMUNITIES CAN COLLABORATE TO CONTRIBUTE TO THE **SOCIETAL OUTCOMES** OF THE **UN** DECADE OF OCEAN SCIENCE FOR SUSTAINABLE DEVELOPMENT??



RESULTS of the DISCUSSION

★ **OL** IS STILL TOO MUCH IN ENGLISH

How to go LOCAL?



★ GO TO CHILDREN IN SCHOOLS TO MAKE THEM AWARE

IDEAS + QUESTIONS

★ INTERDISCIPLINARITY IN SCIENCE-RELATED AREAS IS STILL MISTRUSTED

THE LACK OF FUNDINGS DOESN'T HELP

MMH... SO YOU WANT TO COLLABORATE? DO YOU HAVE A SCIENCE PHD?



★ AN ALREADY EXISTING PRACTICAL OUTCOME?

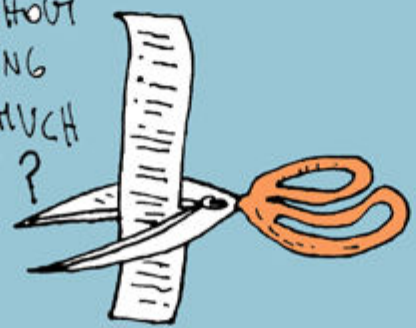


★ TRY TO WORK IN LESS-DEVELOPPED AREAS, WHERE IS MOST NEEDED!

★ **OL** CAN BE USED TO EMPOWER PEOPLE, SO, THEY WILL PUSH STAKEHOLDERS TO THE TABLE.



★ HOW TO SYNTEZIZE WITHOUT LOSING TOO MUCH ???



★ SOMETIMES WRONG COMMUNICATION CAN BE WORSE THAN NO COMMUNICATION AT ALL?



I READ ON FACEBOOK I MIGHT BE DYING...

IF YOU WOULD
LIKE TO KEEP
IN TOUCH, WRITE ME!
folco.contact@gmail.com



Farewell thought:

with such a fascinating topic we
have no excuse when trying to
trigger public interest.