



MED4EBM Identified and Mainstreamed Management Protocols: *challenges versus solutions and lessons learnt.*



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THANK YOU

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AdT

JREDS

INSTM

TCNR

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Maysoon Kteifan
Abdel Rahman Abu Hamdeh

Amel Bellaaj Zouari
Ismail Hamza

Ali Badreddine
Raghda Saad

AND ALL THE STAKEHOLDERS AND COLLABORATORS





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DATA

ANALYSIS

ACTION

CHECK \rightleftarrows ANALYSIS



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Ecosystem Based Management



Or



Or



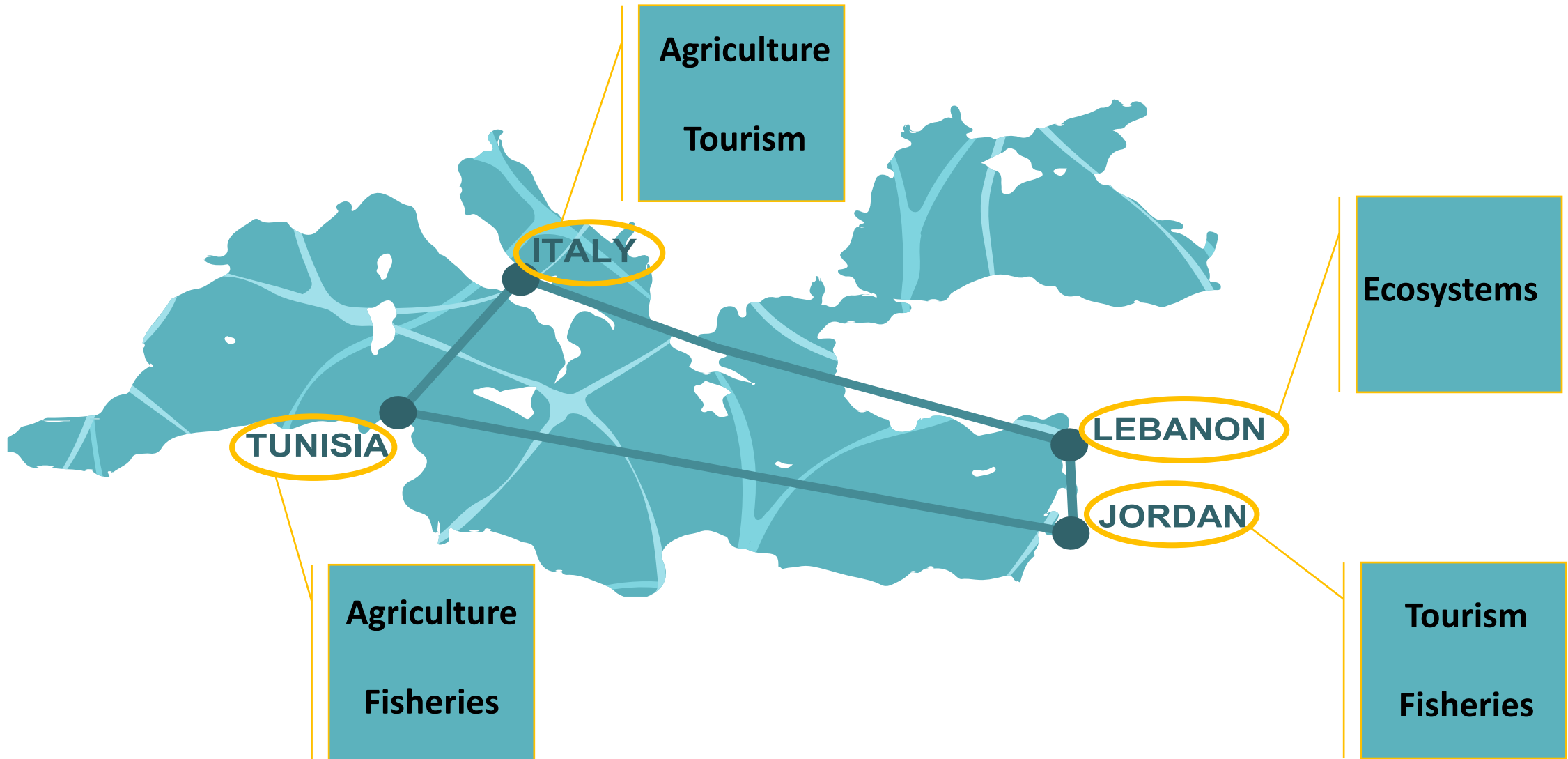
No EBM or Low EBM
(Single species or sector EBM)

Incremental EBM
(Multiple species or sectors EBM)

Comprehensive EBM
(EBM of the entire system)

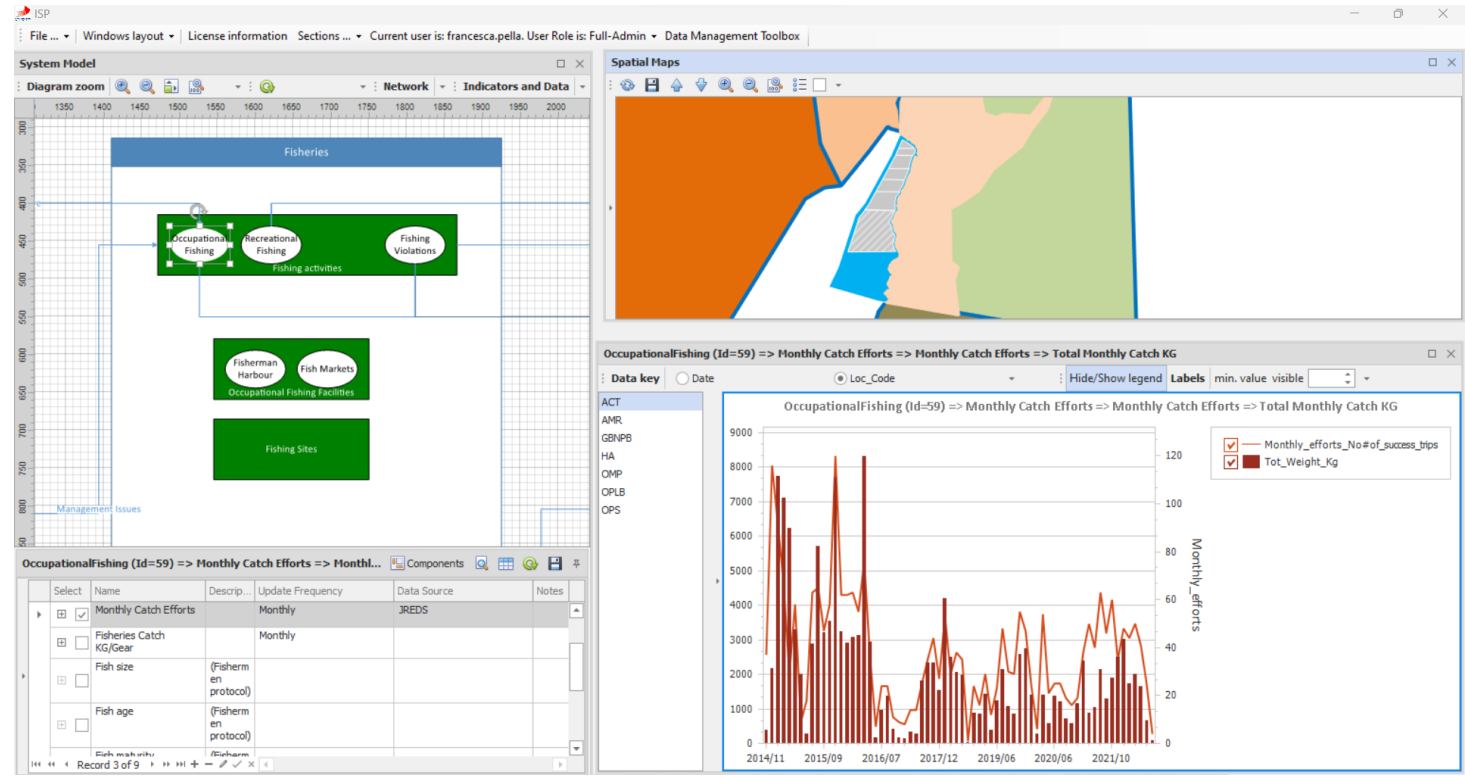
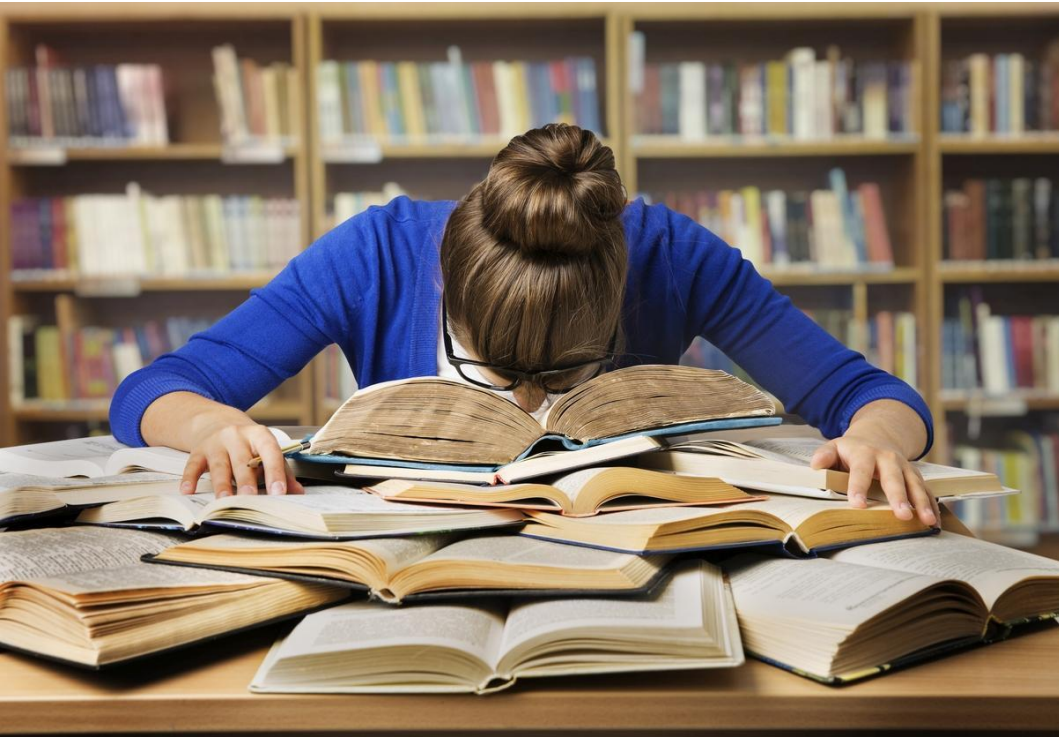


Priority Topics for the System Cause-Effect Analysis





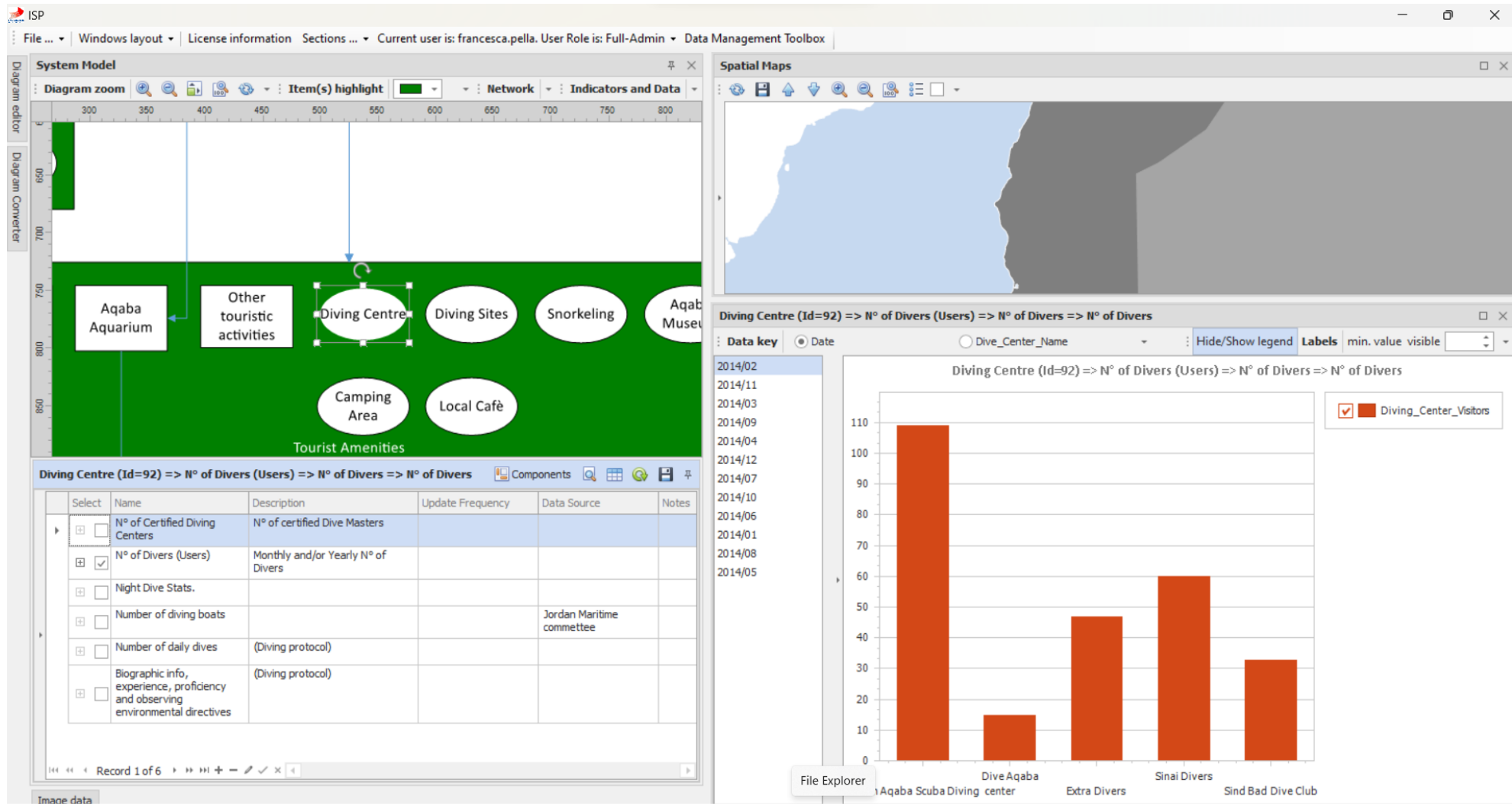
Difference between “having the information” and “having the data”



CHALLENGES

LACK OF INFORMATION

LACK OF TIME SERIES DATA



The screenshot displays the ISP (Information Systems Platform) interface. The main window is titled 'System Model' and shows a diagram of 'Tourist Amenities' with nodes for 'Aqaba Aquarium', 'Other touristic activities', 'Diving Centre', 'Diving Sites', 'Snorkeling', 'Aqaba Museum', 'Camping Area', and 'Local Cafè'. A 'Spatial Maps' window shows a map of the region. A data table window titled 'Diving Centre (Id=92) => N° of Divers (Users) => N° of Divers => N° of Divers' is open, showing a table with columns for Name, Description, Update Frequency, and Data Source. A bar chart window titled 'Diving Centre (Id=92) => N° of Divers (Users) => N° of Divers => N° of Divers' displays the number of divers for different centers over time.

| Select | Name | Description | Update Frequency | Data Source | Notes |
|-------------------------------------|---|------------------------------------|------------------|---------------------------|-------|
| <input type="checkbox"/> | N° of Certified Diving Centers | N° of certified Dive Masters | | | |
| <input checked="" type="checkbox"/> | N° of Divers (Users) | Monthly and/or Yearly N° of Divers | | | |
| <input type="checkbox"/> | Night Dive Stats. | | | | |
| <input type="checkbox"/> | Number of diving boats | | | Jordan Maritime committee | |
| <input type="checkbox"/> | Number of daily dives | (Diving protocol) | | | |
| <input type="checkbox"/> | Biographic info, experience, proficiency and observing environmental directives | (Diving protocol) | | | |

| Date | Diving_Center_Visitors |
|---------|------------------------|
| 2014/02 | 110 |
| 2014/11 | 15 |
| 2014/03 | 48 |
| 2014/09 | 60 |
| 2014/04 | 32 |
| 2014/12 | |
| 2014/07 | |
| 2014/10 | |
| 2014/06 | |
| 2014/01 | |
| 2014/08 | |
| 2014/05 | |



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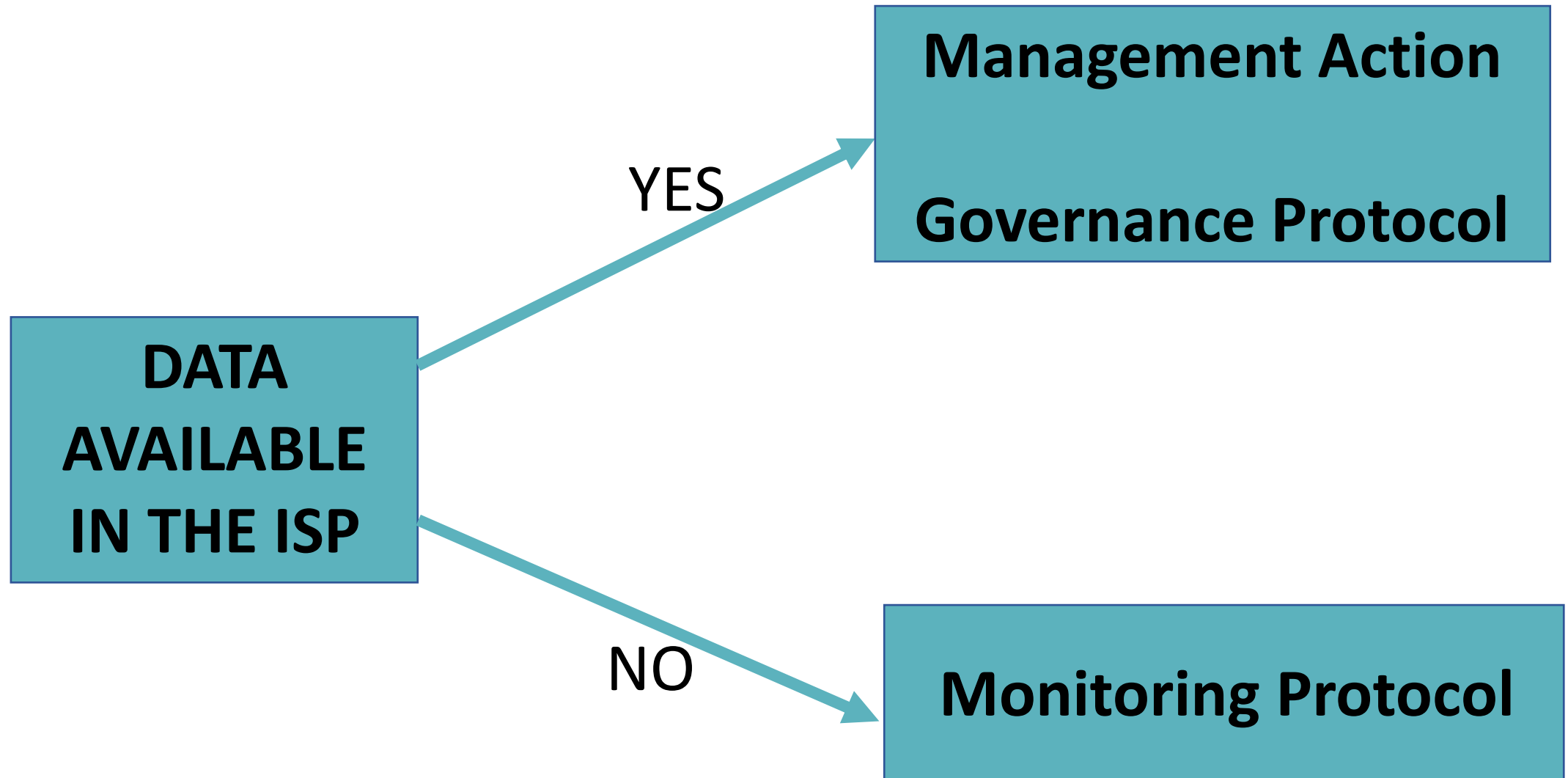
ANALYSIS

ACTION

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GAP ANALYSIS





ITALY

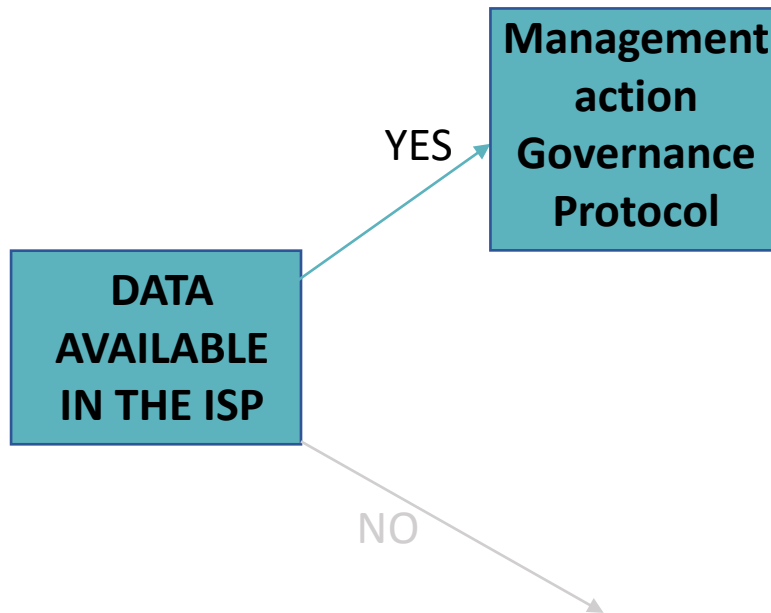
Institutions responsible to collect data
Standard and recurring monitoring programme



BUT

Data from online repositories
Sources of information and field procedures fragmented and scattered

Networking, synergies and sustainability of the ISP aimed to support management actions.
Using the two target areas as pilot areas to then enlarge other management actions to other areas within the Gulf of Corigliano





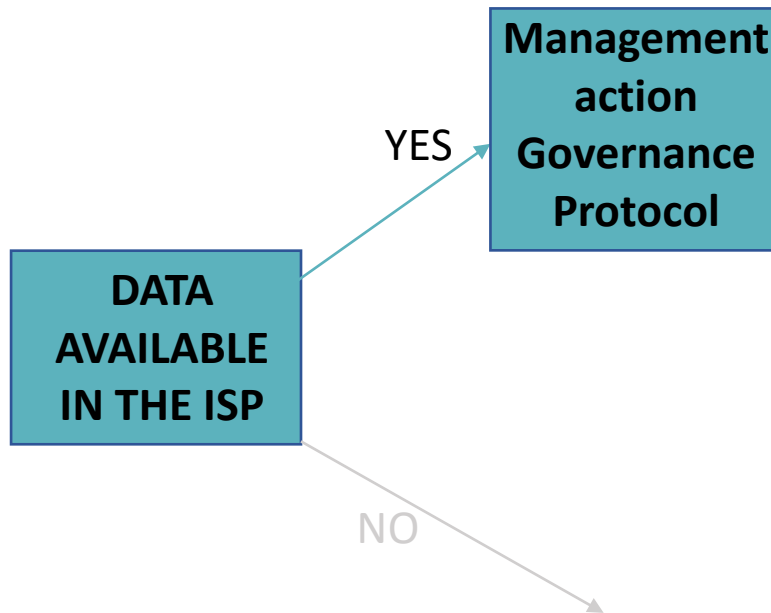
ITALY

AGRICULTURE

Monitoring scheme for the assessment of the Ecosystem Based and Integrated Coastal Zone Management in the “gulf of Corigliano” pilot area applied to agriculture driver.

TOURISM

Monitoring scheme for the assessment of the Ecosystem based and Integrated Coastal Zone Management in the “gulf of Corigliano” pilot area applied to tourism driver.

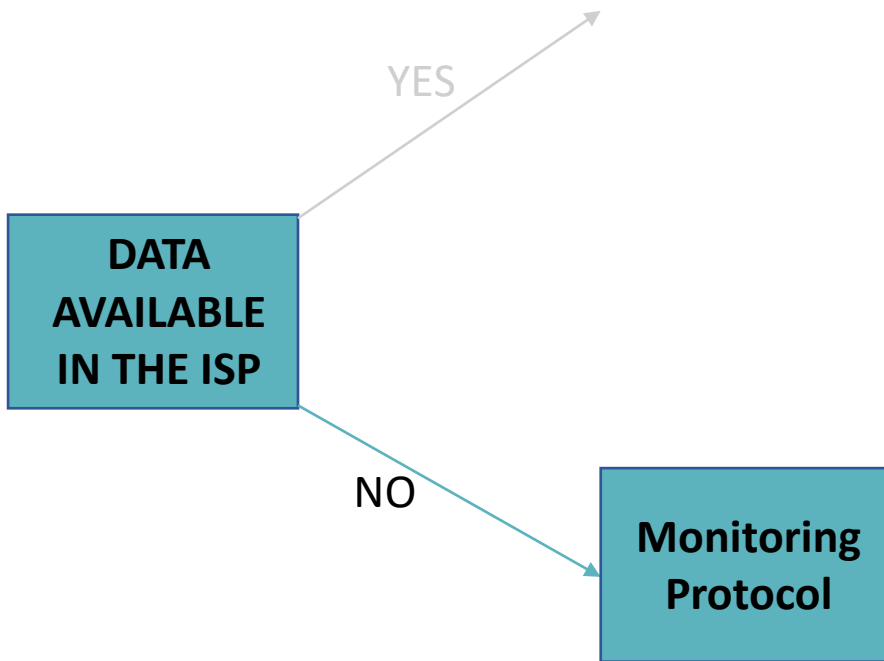




JORDAN

Fishery activities

Monitoring scheme for fisheries following Ecosystem Based and Integrated Coastal Zone Management on the Jordanian coast of the Gulf of Aqaba

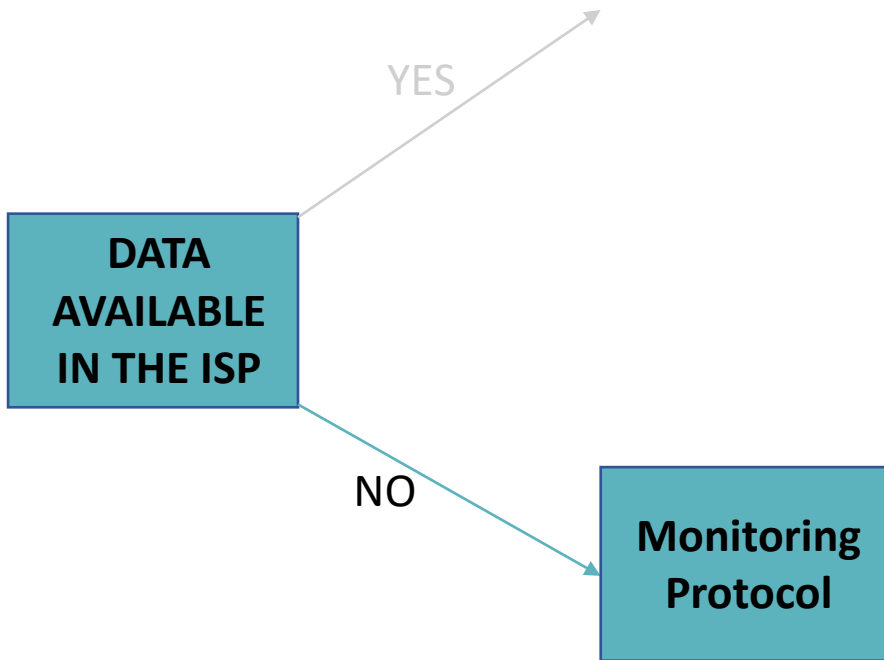




JORDAN

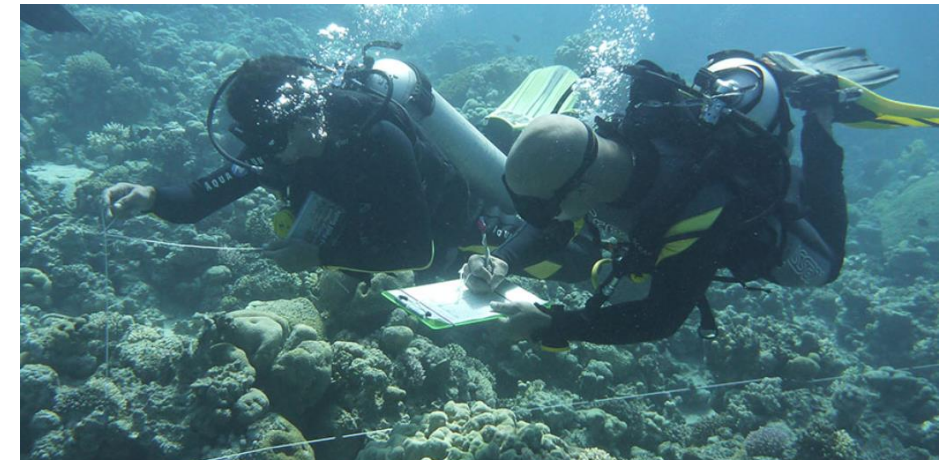
Glass bottom boats Recreational diving & ReefCheck

Monitoring scheme for touristic coastal amenities, namely Recreational Diving and Touristic Glass Bottom Boats following Ecosystem Based and Integrated Coastal Zone Management on the Jordanian coast of the Gulf of Aqaba



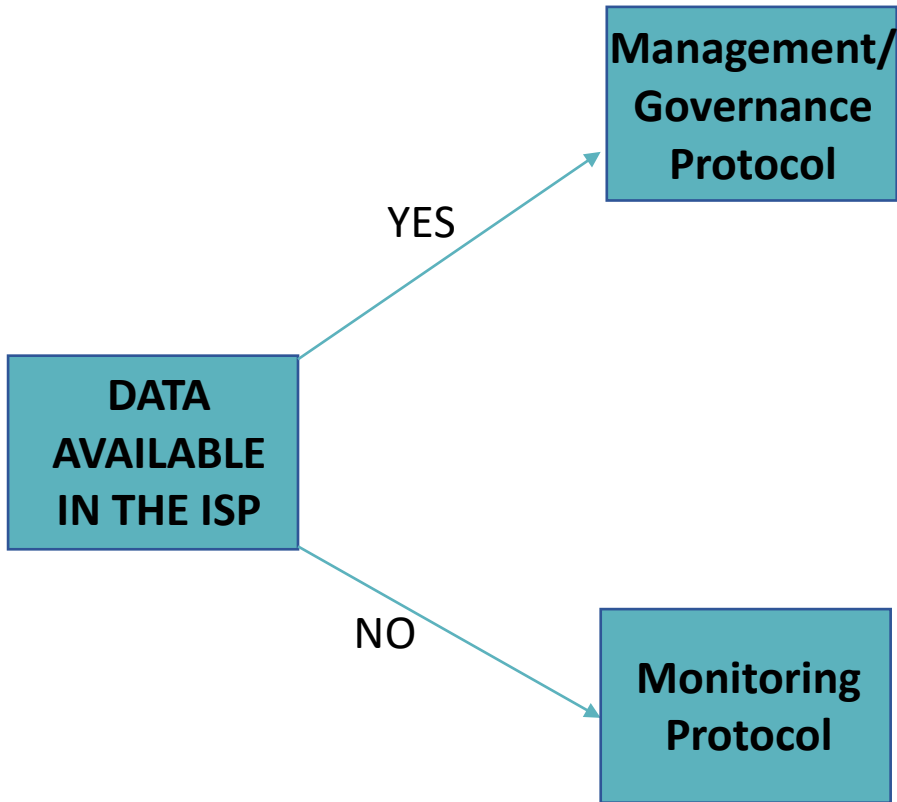
Coastal Habitats Monitoring Jordan

Reef Check





LEBANON



Terrestrial flora

INVASIVE PLANTS MANAGEMENT PLAN IN TYRE AND ABBASIEH NATURE RESERVES

Marine Fauna

STRATEGIC BLUEPRINT FOR SAFEGUARDING MARINE TURTLES IN TCNR

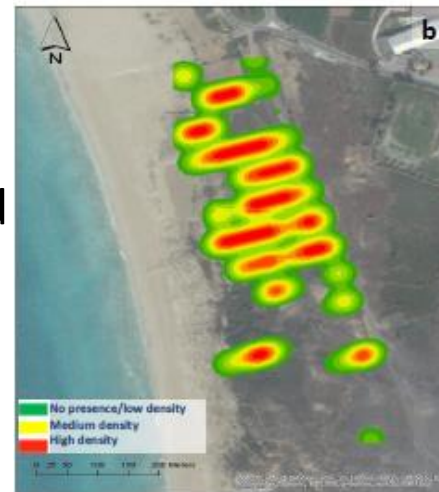


LEBANON

Terrestrial flora

INVASIVE PLANTS MANAGEMENT PLAN IN TYRE AND ABBASIEH NATURE RESERVES

Control/Eradication of camphorweed (*Heterotheca subaxillaris*) in TCNR



Map above and pictures from: **Bou Dagher Kharrat et al 2016**

Include a new area

Monitoring of other alien species

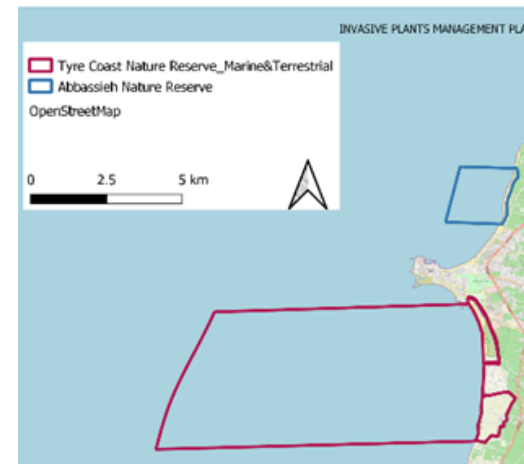


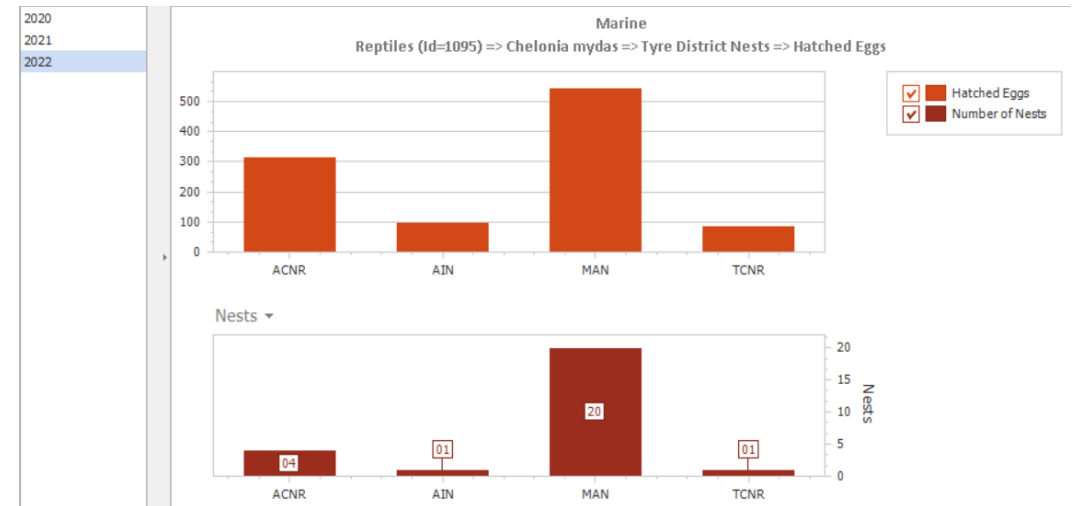
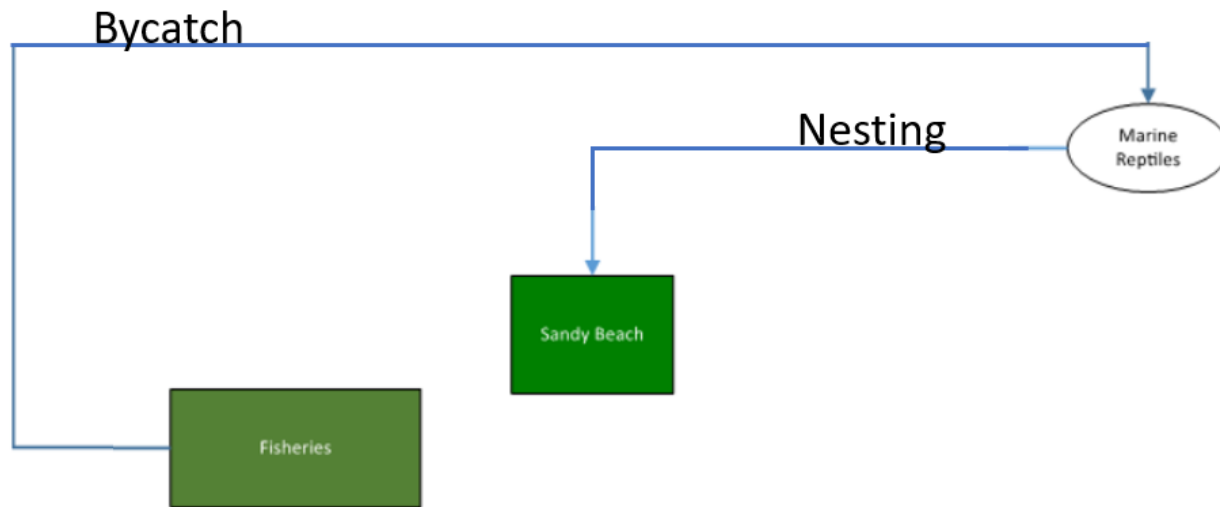
Fig. 6: *Oenothera drummondii*



LEBANON

Marine fauna

STRATEGIC BLUEPRINT FOR SAFEGUARDING MARINE TURTLES IN TCNR



But

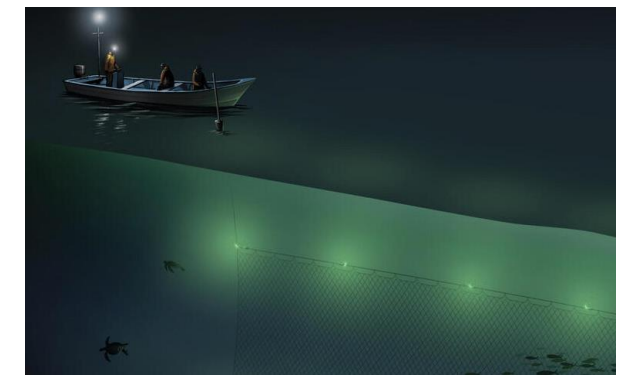
BYCATCH:

Evaluate the impact – exploratory surveys

Meetings with fishermen

Exploring possible synergies and collaborations, such as

Identifying and testing for the methods/technical solutions to mitigate incidental catches





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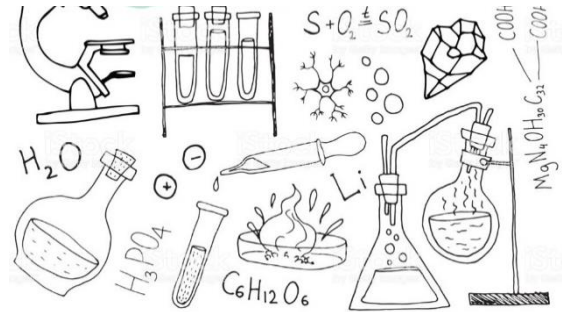
ACTION

CHECK ↔ ANALYSIS



Development of Monitoring protocol

From theory to practice



Prepare logistics



1. Develop Protocol

2. Field work

Collect samples according to the protocol

3. Lab. Analysis

and/or data analysis

4. Data updating

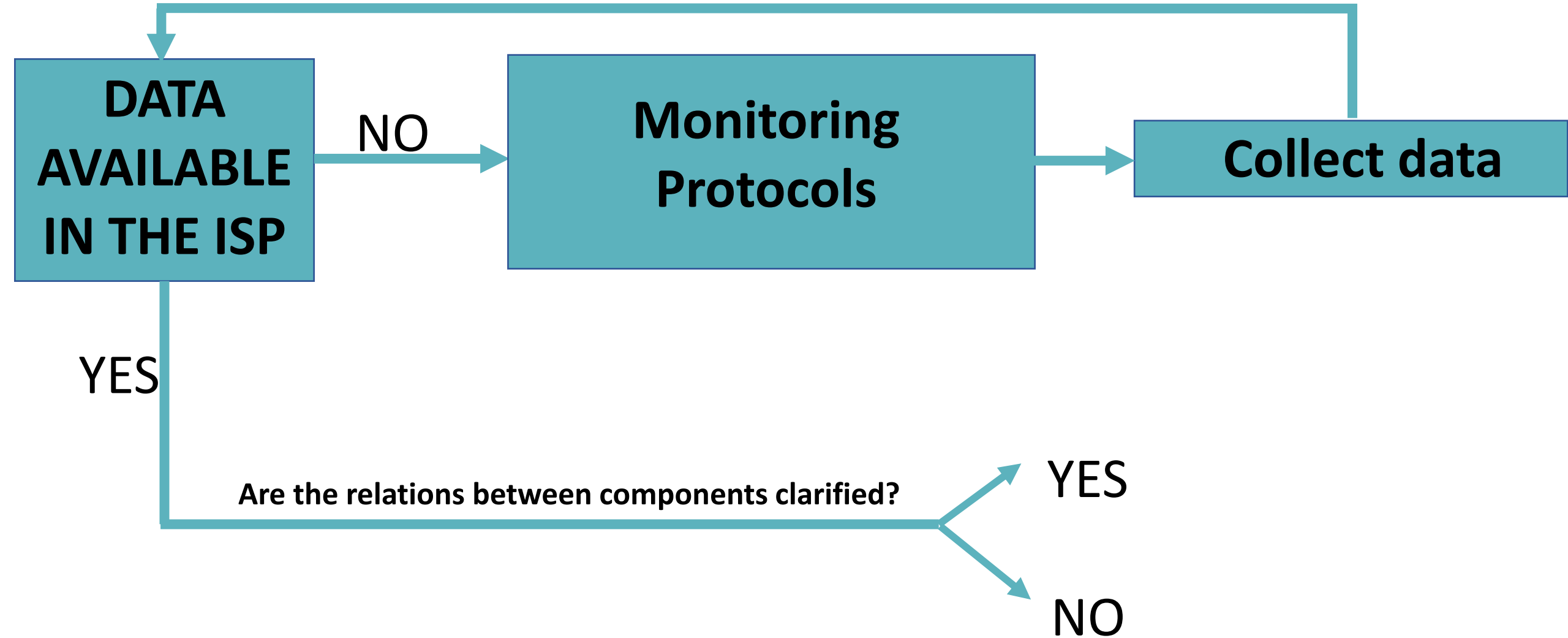
Integrated Spatial Planning

Results



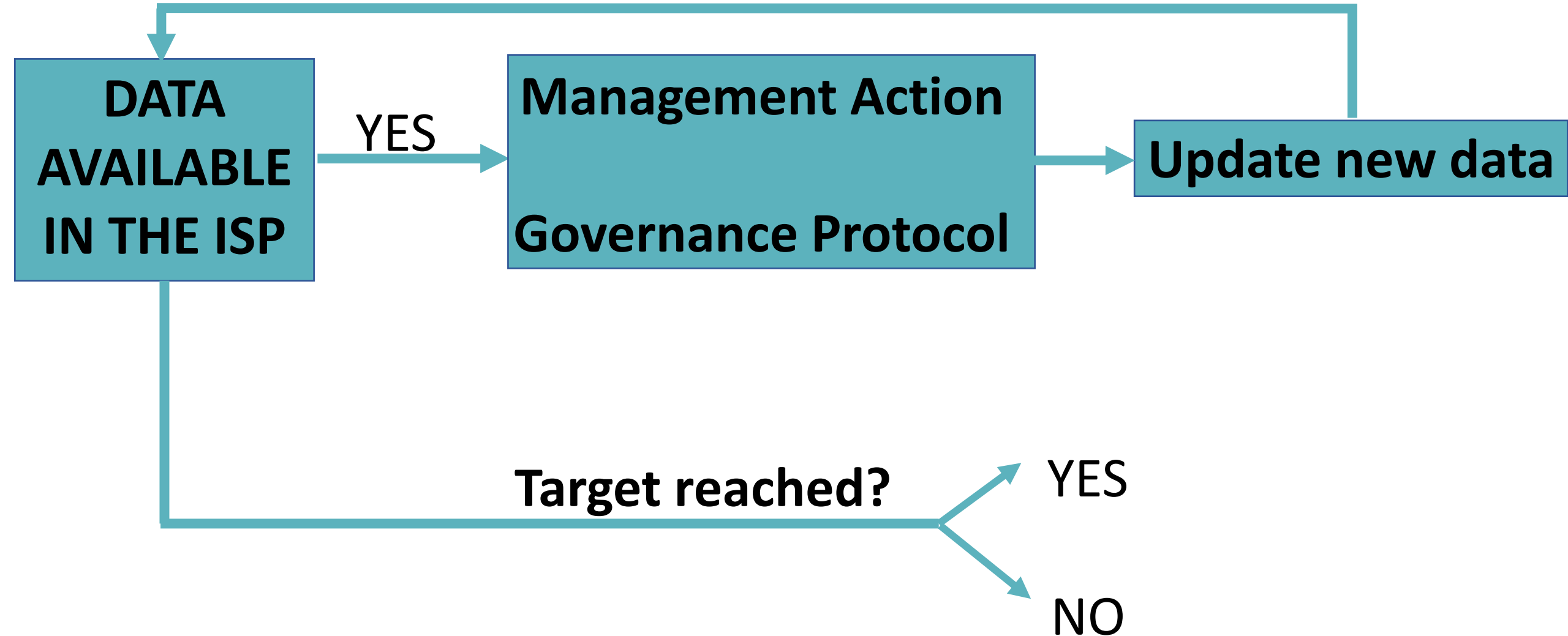


Development of Management action



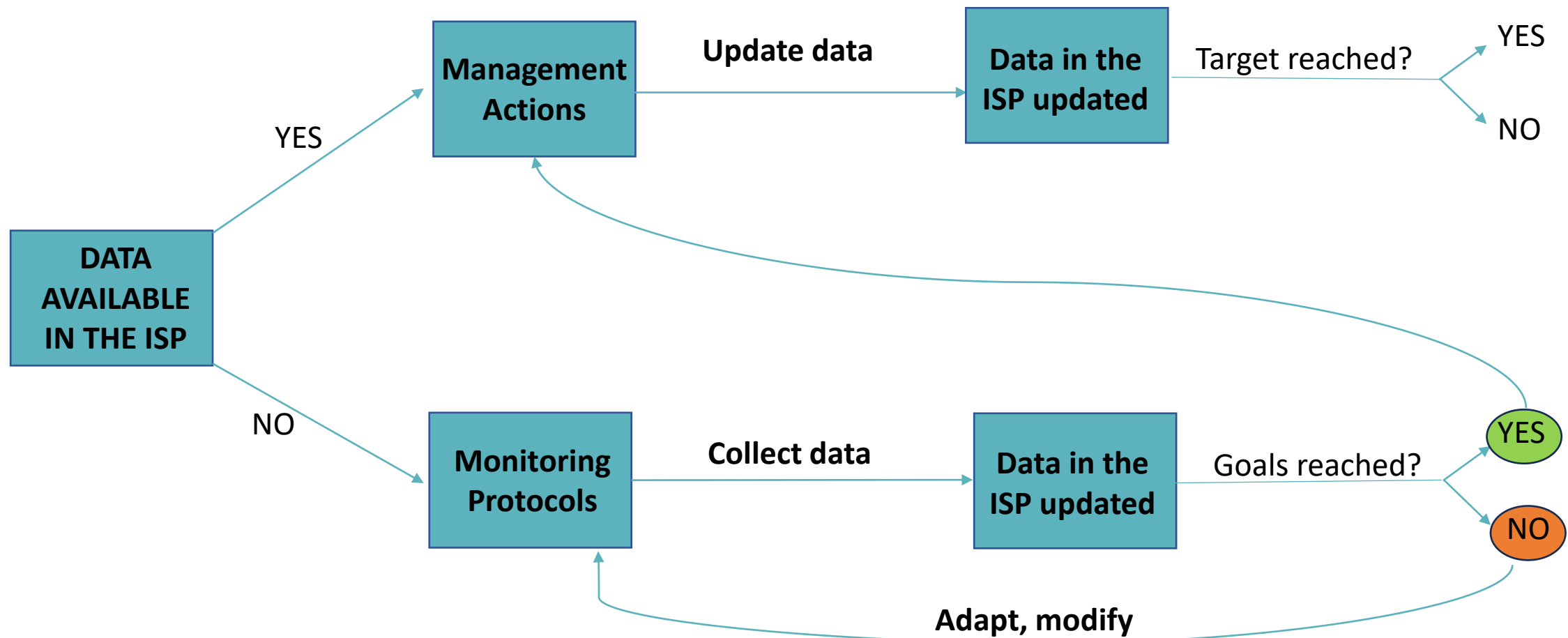


Development of Management action





MED4EBM





THANK YOU

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