

A Socio-Economic and Environmental Knowledge Needs  
Knowledge Base (SEE-IN KB)  
in Support of SDG Implementation and Monitoring

Hans-Peter Plag and Shelley Jules-Plag  
*Old Dominion University, Norfolk, VA, USA*



A Socio-Economic and Environmental Knowledge Needs  
Knowledge Base (SEE-IN KB)  
in Support of SDG Implementation and Monitoring

How to grow into a successful SDG?

Hans-Peter Plag and Shelley Jules-Plag  
*Old Dominion University, Norfolk, VA, USA*



# United Nations' Agenda 2013: "Road to Dignity"

**1** NO POVERTY



**2** ZERO HUNGER



**3** GOOD HEALTH AND WELL-BEING



**4** QUALITY EDUCATION



**5** GENDER EQUALITY




**6** CLEAN WATER AND SANITATION



**7** AFFORDABLE AND CLEAN ENERGY



**8** DECENT WORK AND ECONOMIC GROWTH



**9** INDUSTRY, INNOVATION AND INFRASTRUCTURE



**10** REDUCED INEQUALITIES



**11** SUSTAINABLE CITIES AND COMMUNITIES



**12** RESPONSIBLE CONSUMPTION AND PRODUCTION



**13** CLIMATE ACTION



**14** LIFE BELOW WATER



**15** LIFE ON LAND



**16** PEACE, JUSTICE AND STRONG INSTITUTIONS



**17** PARTNERSHIPS FOR THE GOALS

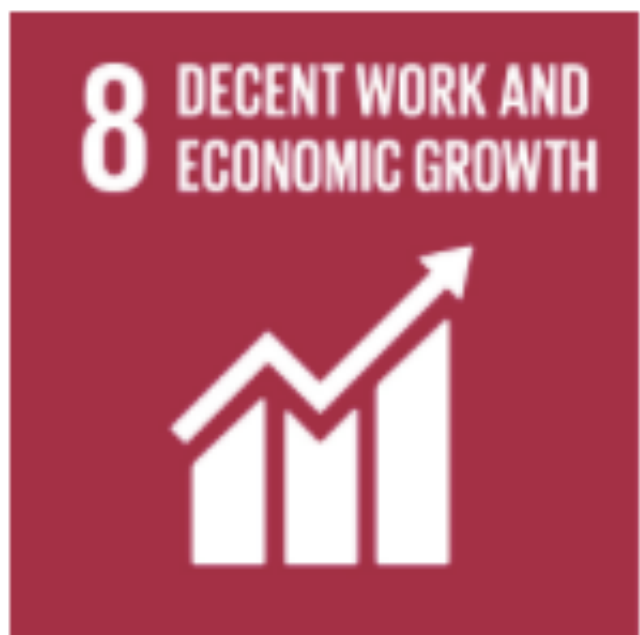
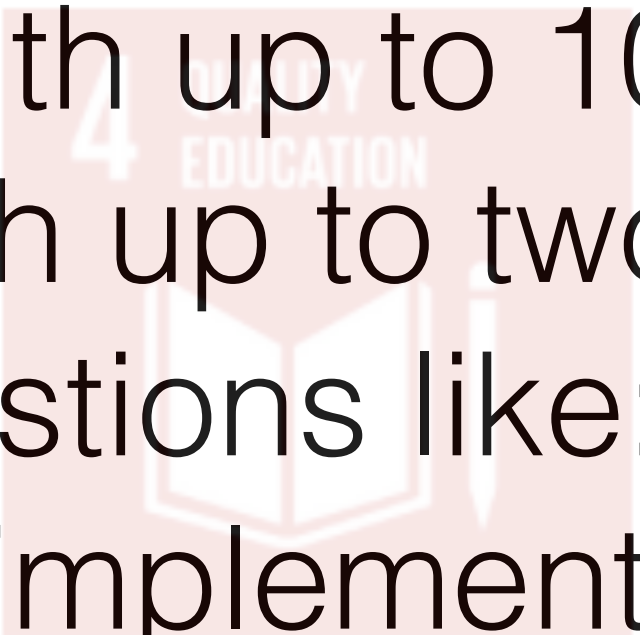
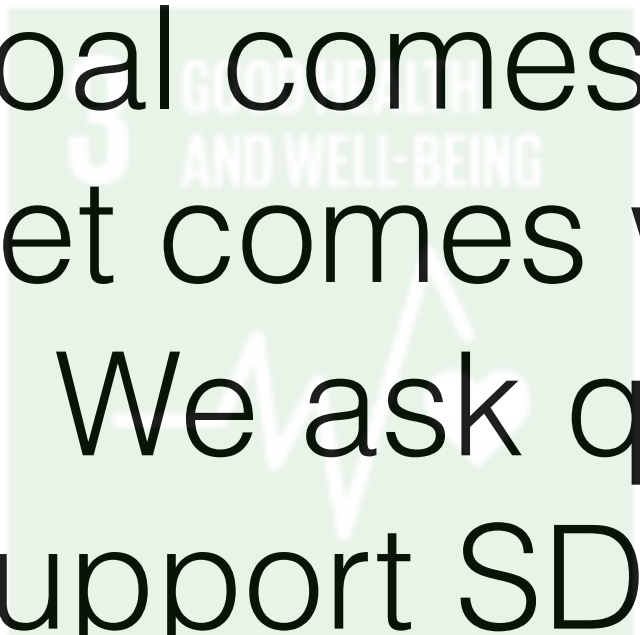
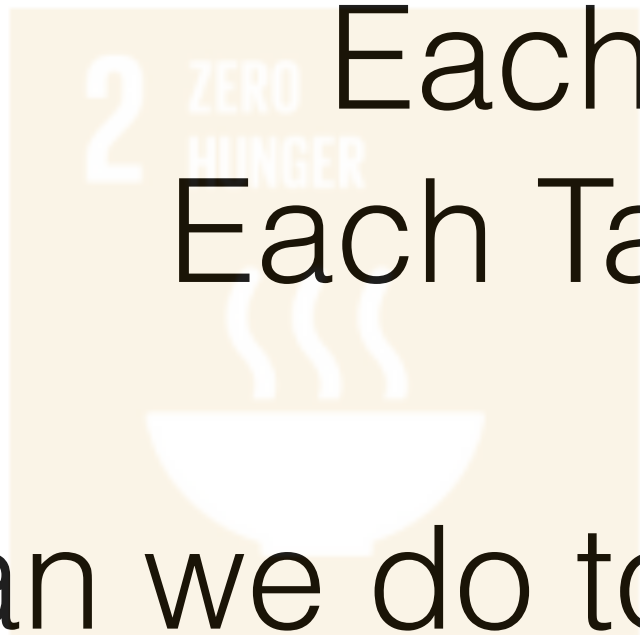


**SUSTAINABLE DEVELOPMENT GOALS**

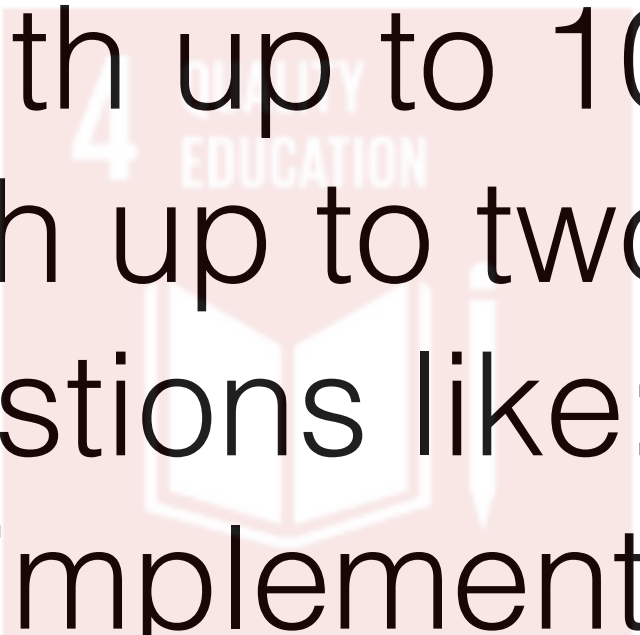
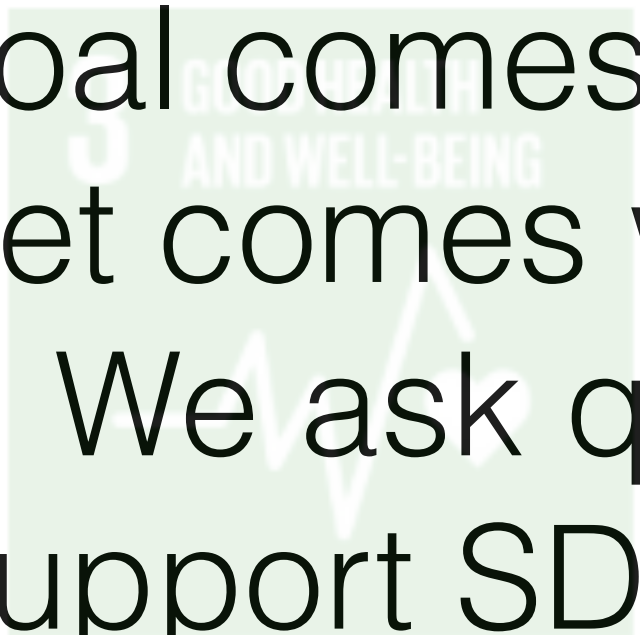
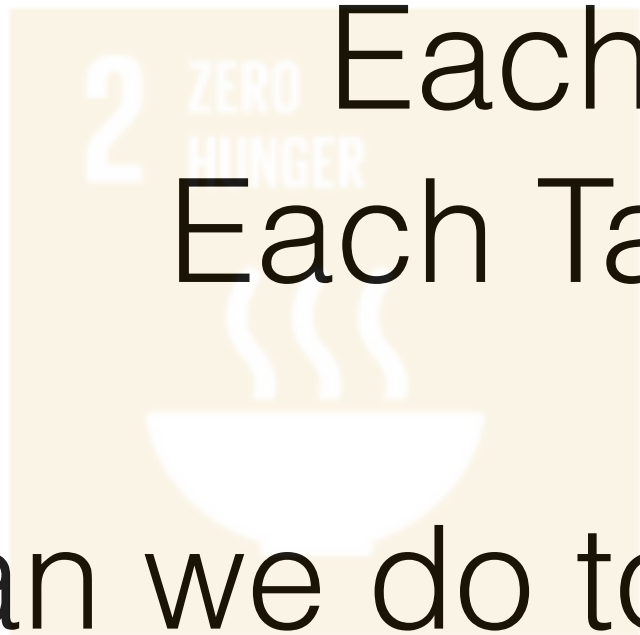
# United Nations' Agenda 2013: "Road to Dignity"

Each Goal comes with up to 10 Targets  
Each Target comes with up to two indicators  
We ask questions like:

What can we do to support SDG implementation and monitoring?



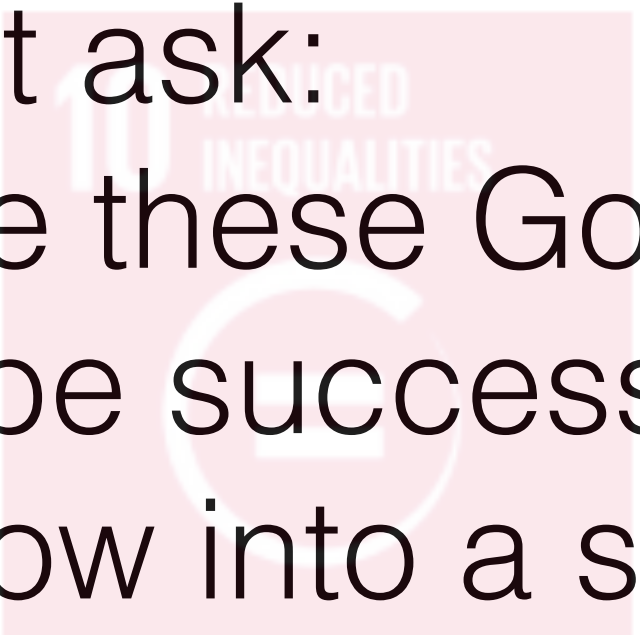
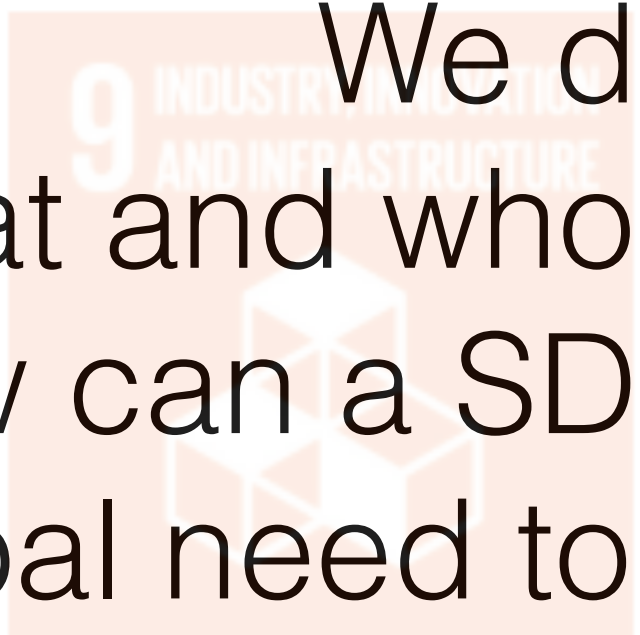
# United Nations' Agenda 2013: "Road to Dignity"



Each Goal comes with up to 10 Targets  
Each Target comes with up to two indicators

We ask questions like:

What can we do to support SDG implementation and monitoring?



We don't ask:

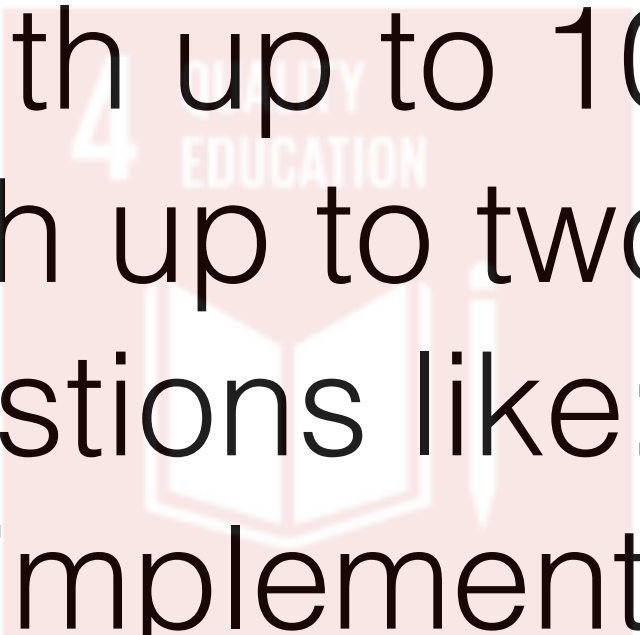
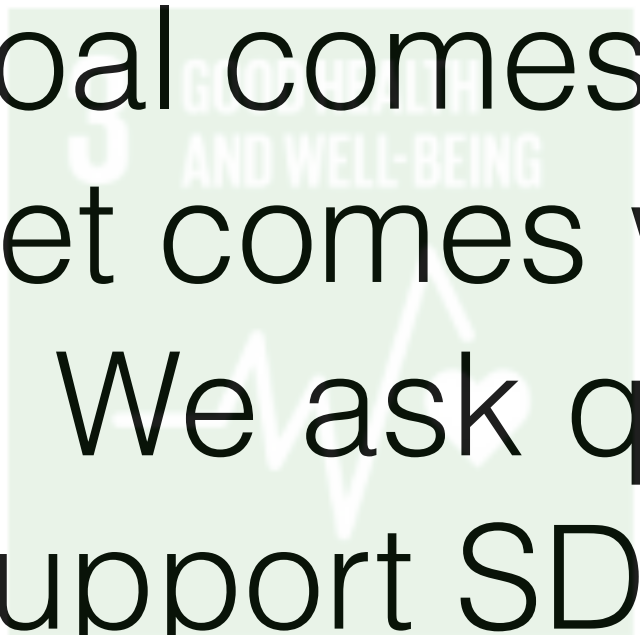
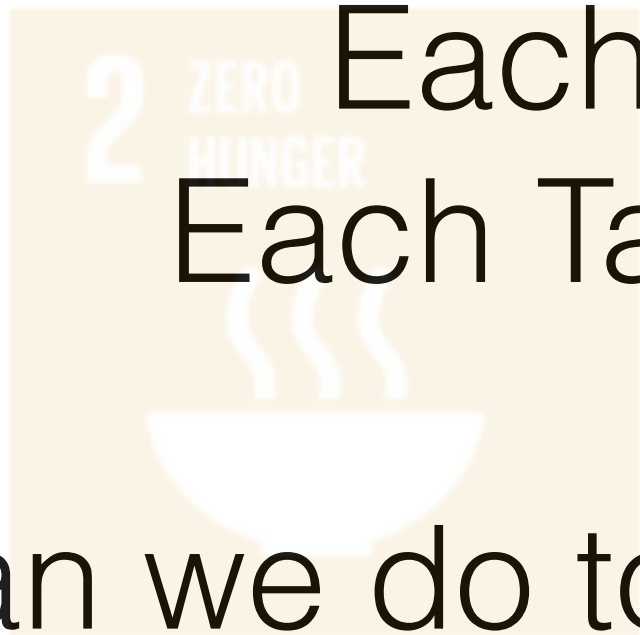
What and who are these Goals?

How can a SDG be successful?

What does a goal need to grow into a successful goal?



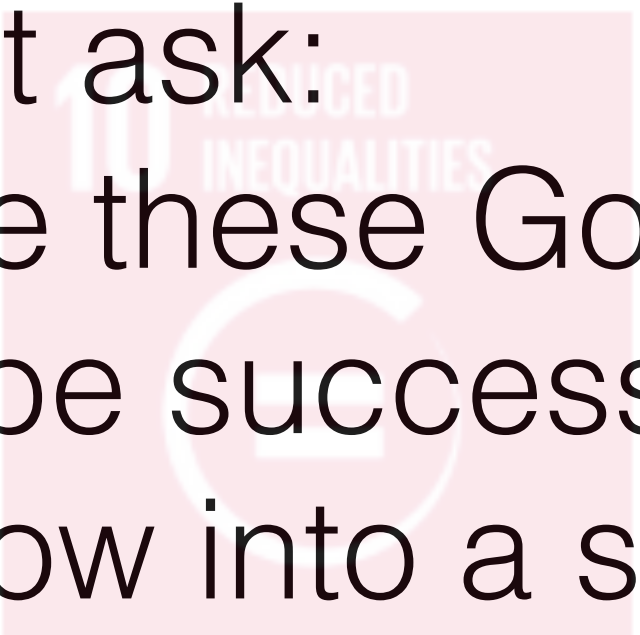
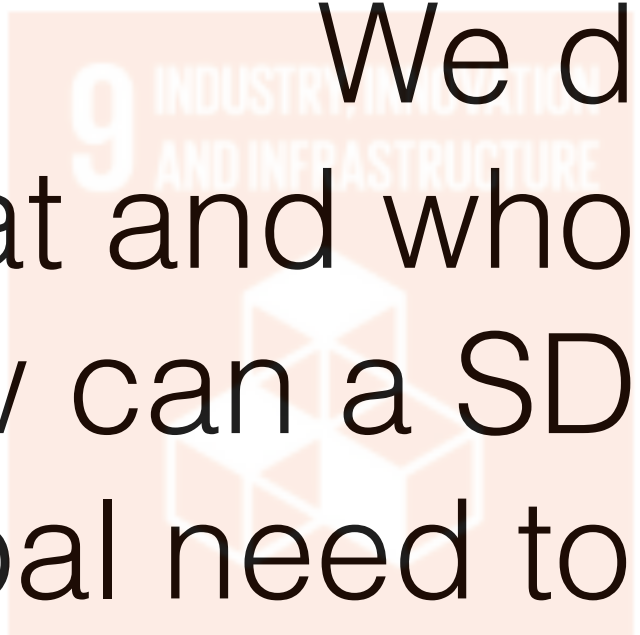
# United Nations' Agenda 2013: "Road to Dignity"



Each Goal comes with up to 10 Targets  
Each Target comes with up to two indicators

We ask questions like:

What can we do to support SDG implementation and monitoring?

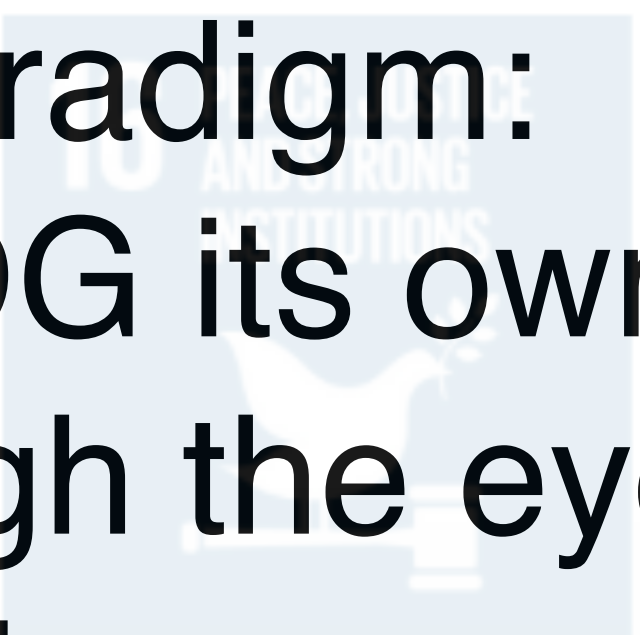
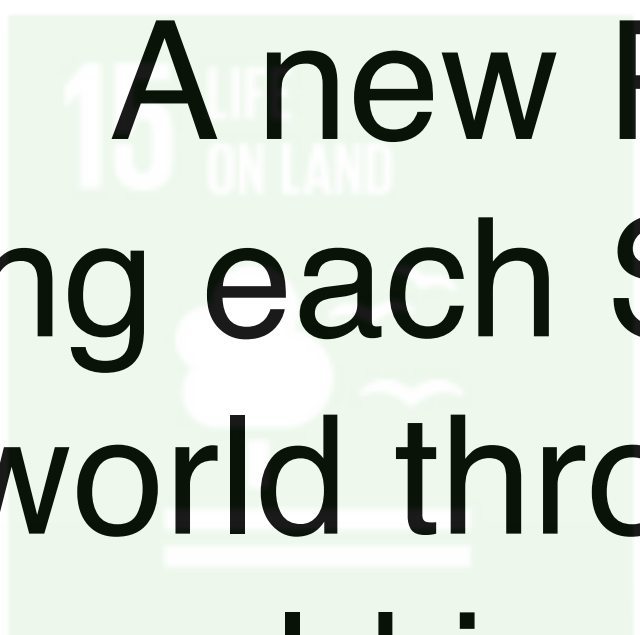
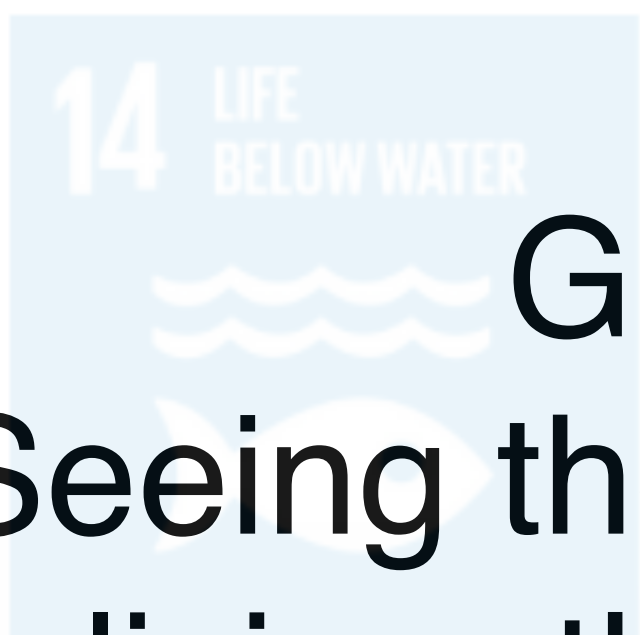


We don't ask:

What and who are these Goals?

How can a SDG be successful?

What does a goal need to grow into a successful goal?



## A new Paradigm:

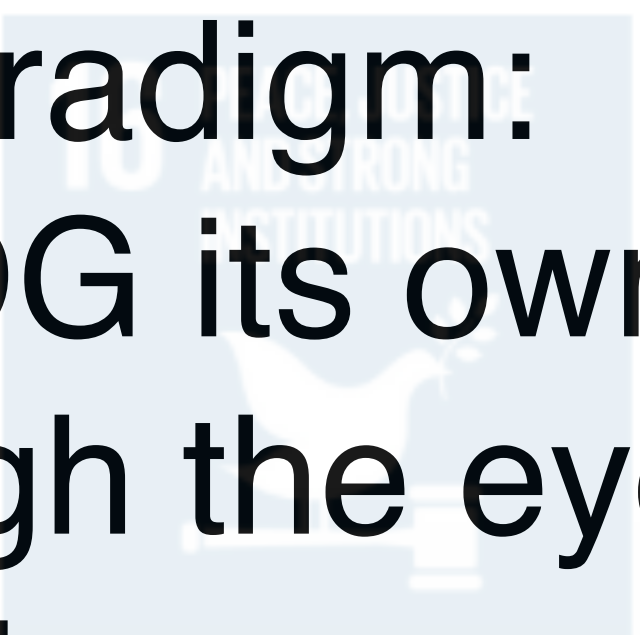
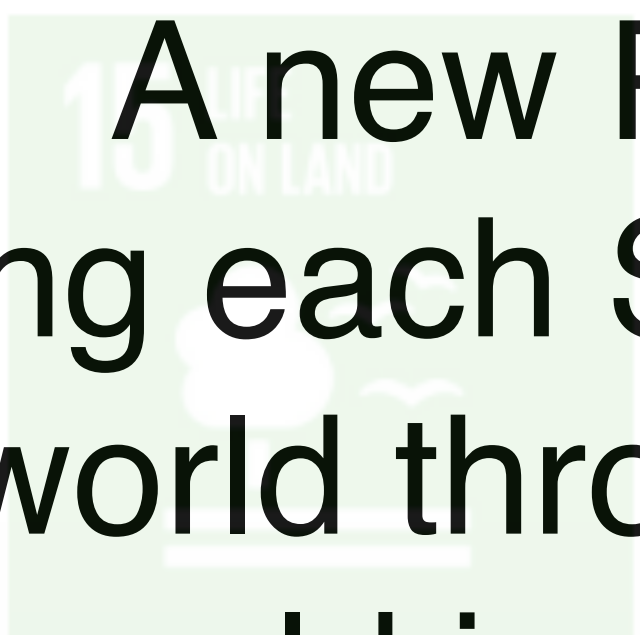
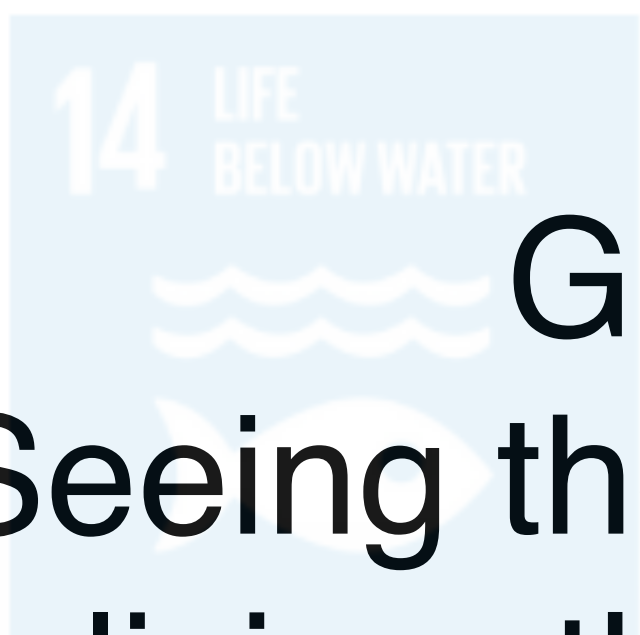
Giving each SDG its own life

Seeing the world through the eyes of a SDG

Realizing, the world is not prepared for the goals

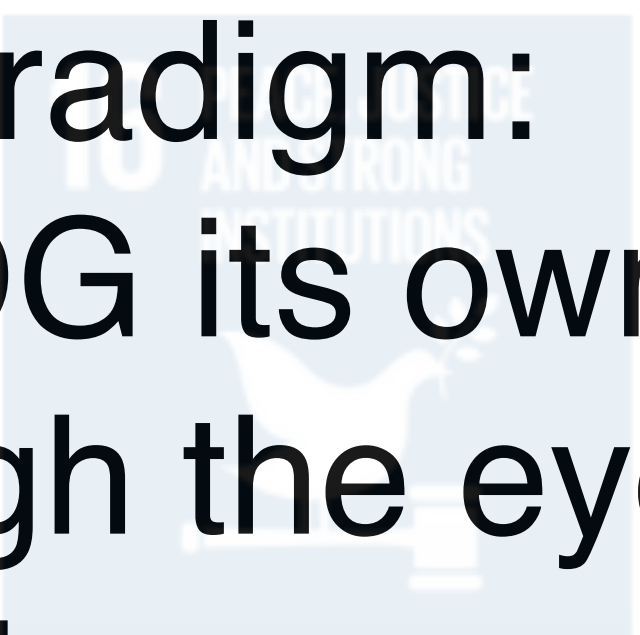
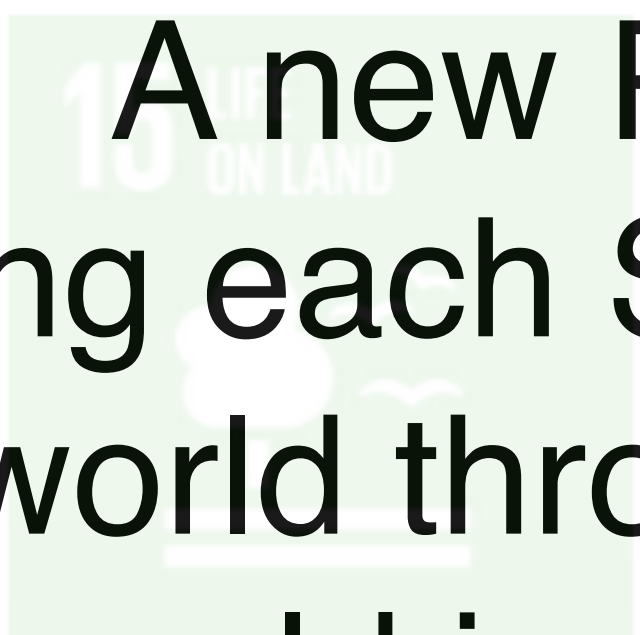
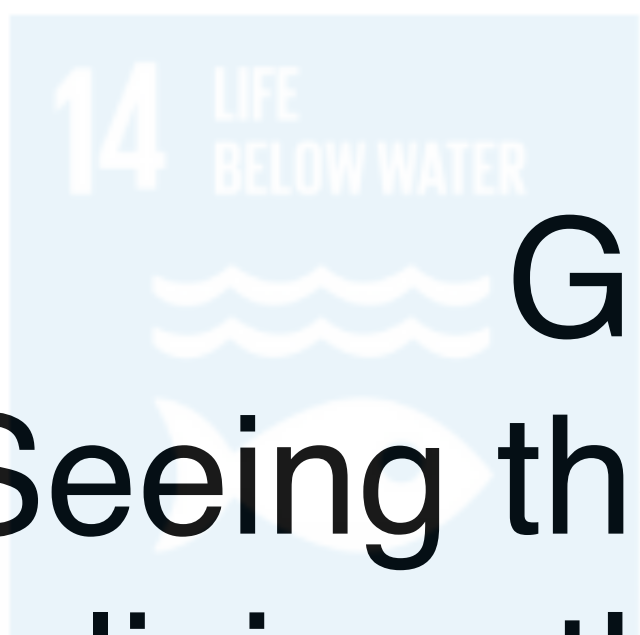


# United Nations' Agenda 2013: "Road to Dignity"



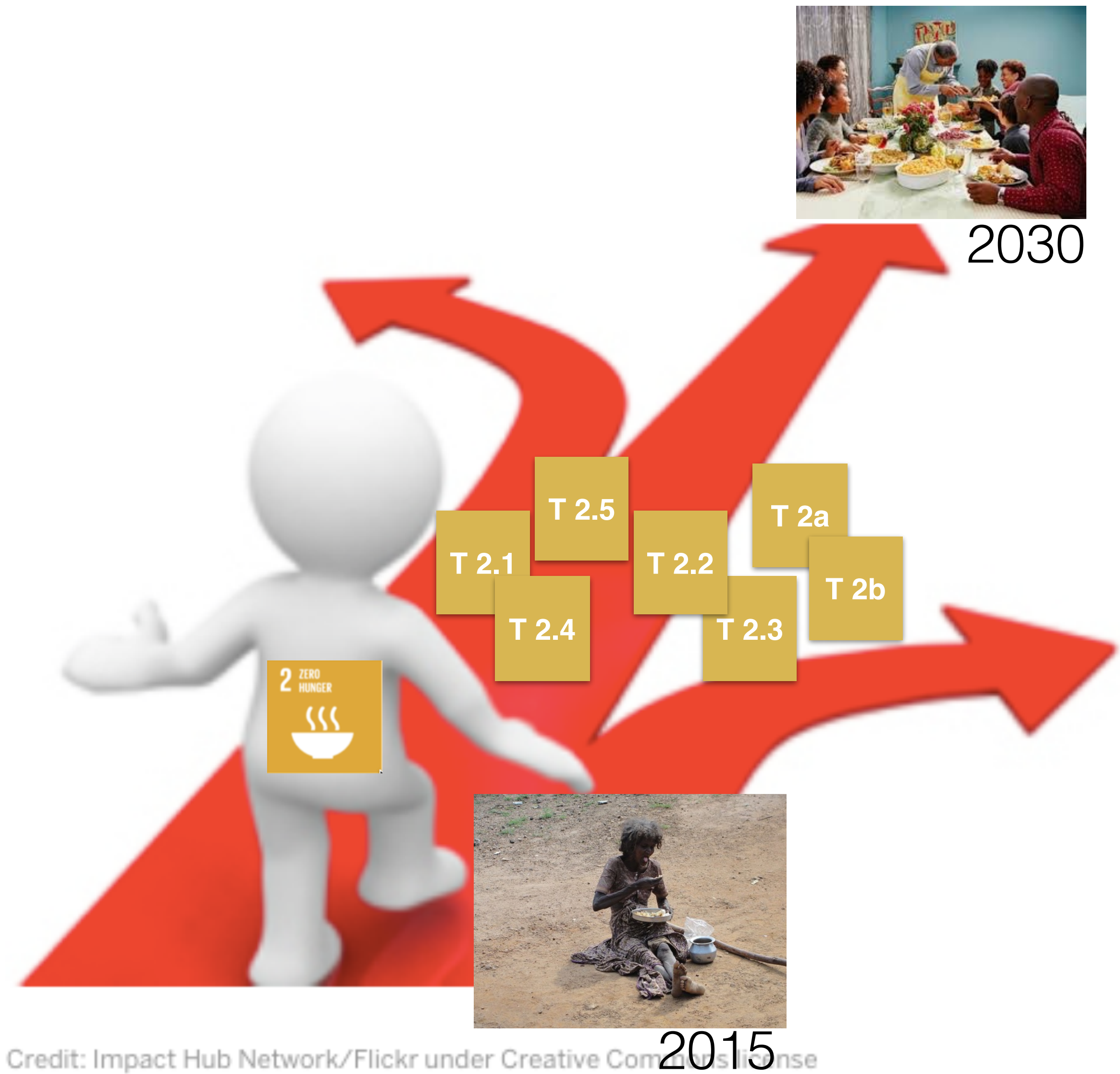
**A new Paradigm:**  
Giving each SDG its own life  
Seeing the world through the eyes of a SDG  
Realizing, the world is not prepared for the goals

# United Nations' Agenda 2013: "Road to Dignity"



**A new Paradigm:**  
Giving each SDG its own life  
Seeing the world through the eyes of a SDG  
Realizing, the world is not prepared for the goals

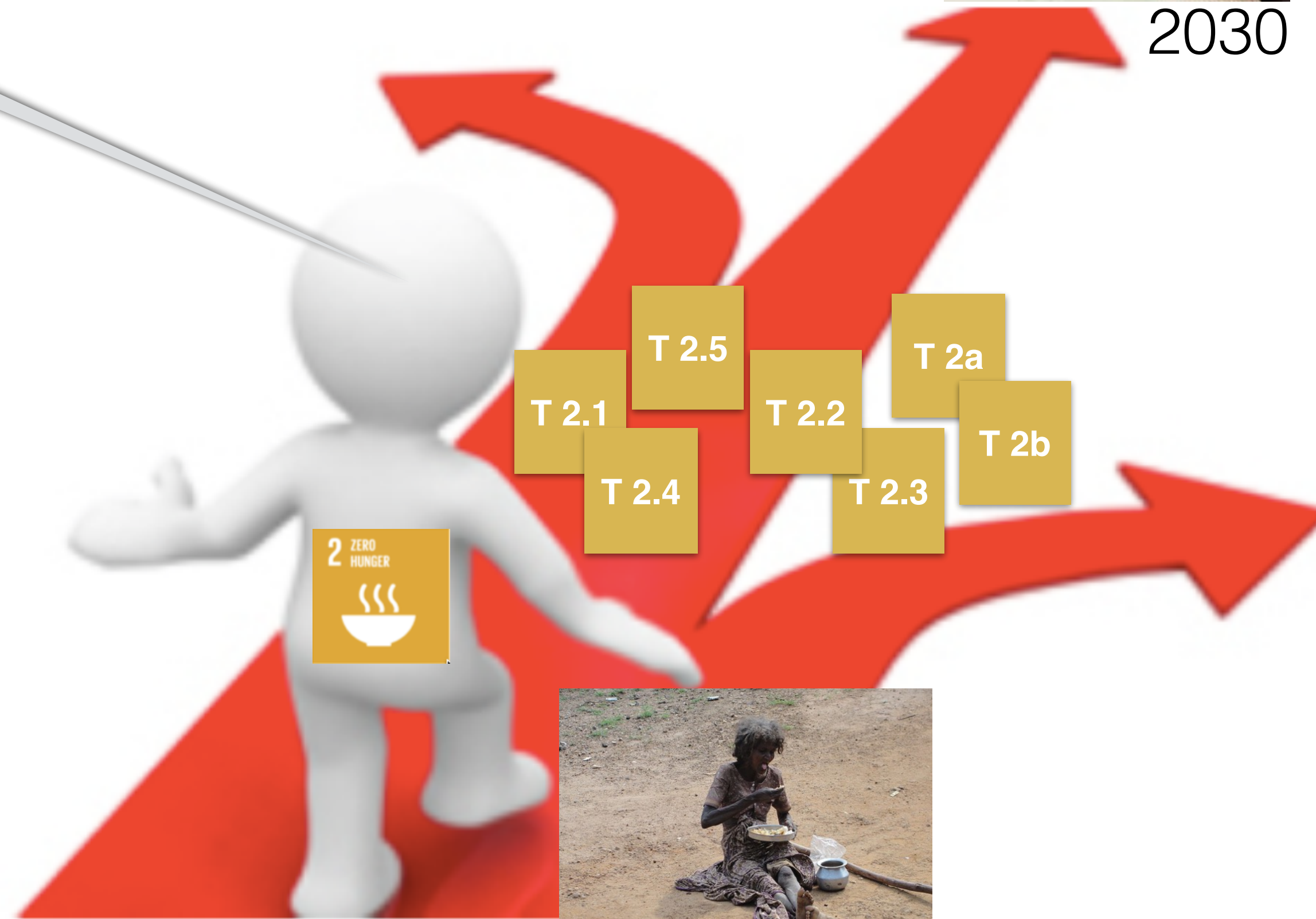




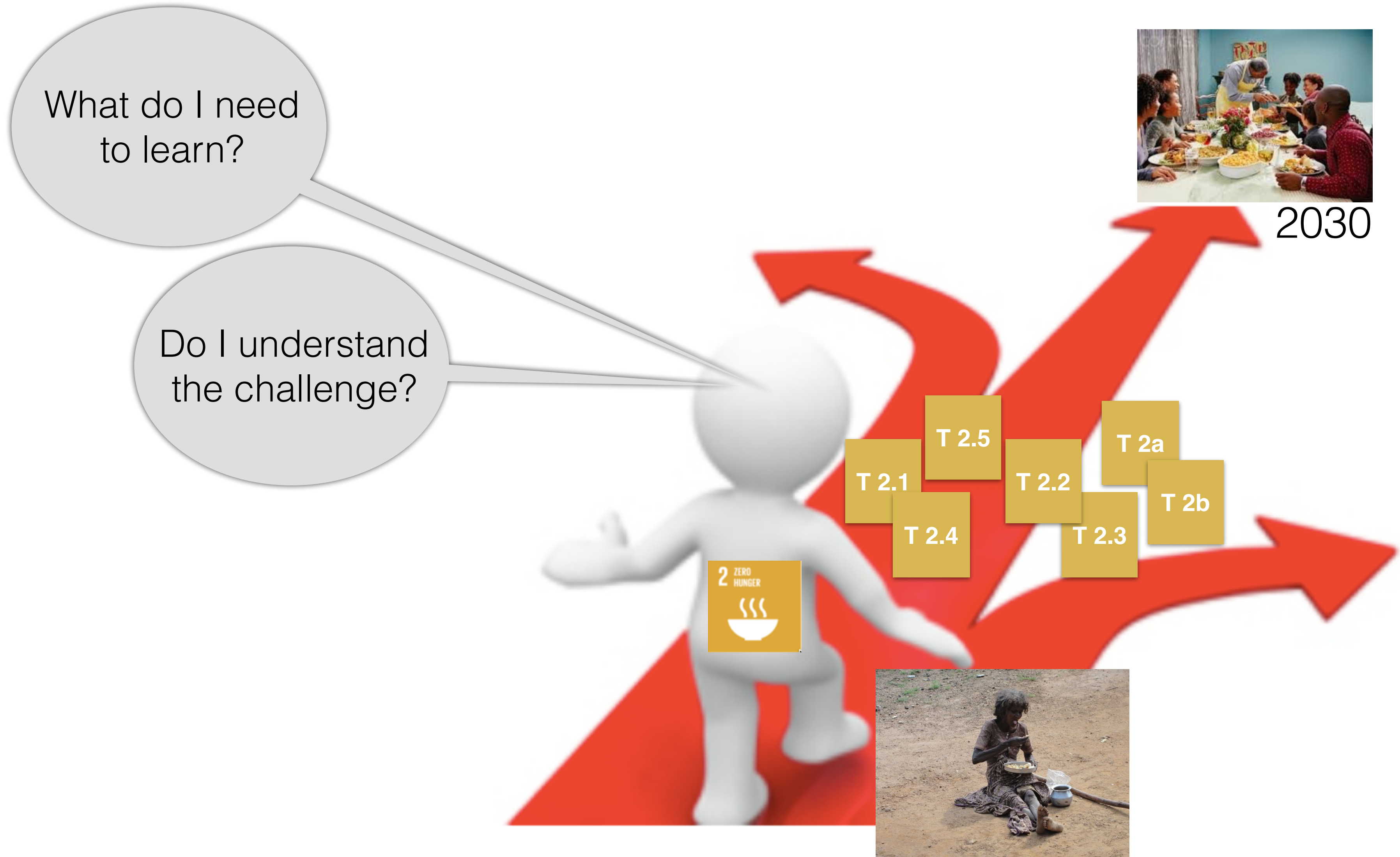
What do I need to learn?

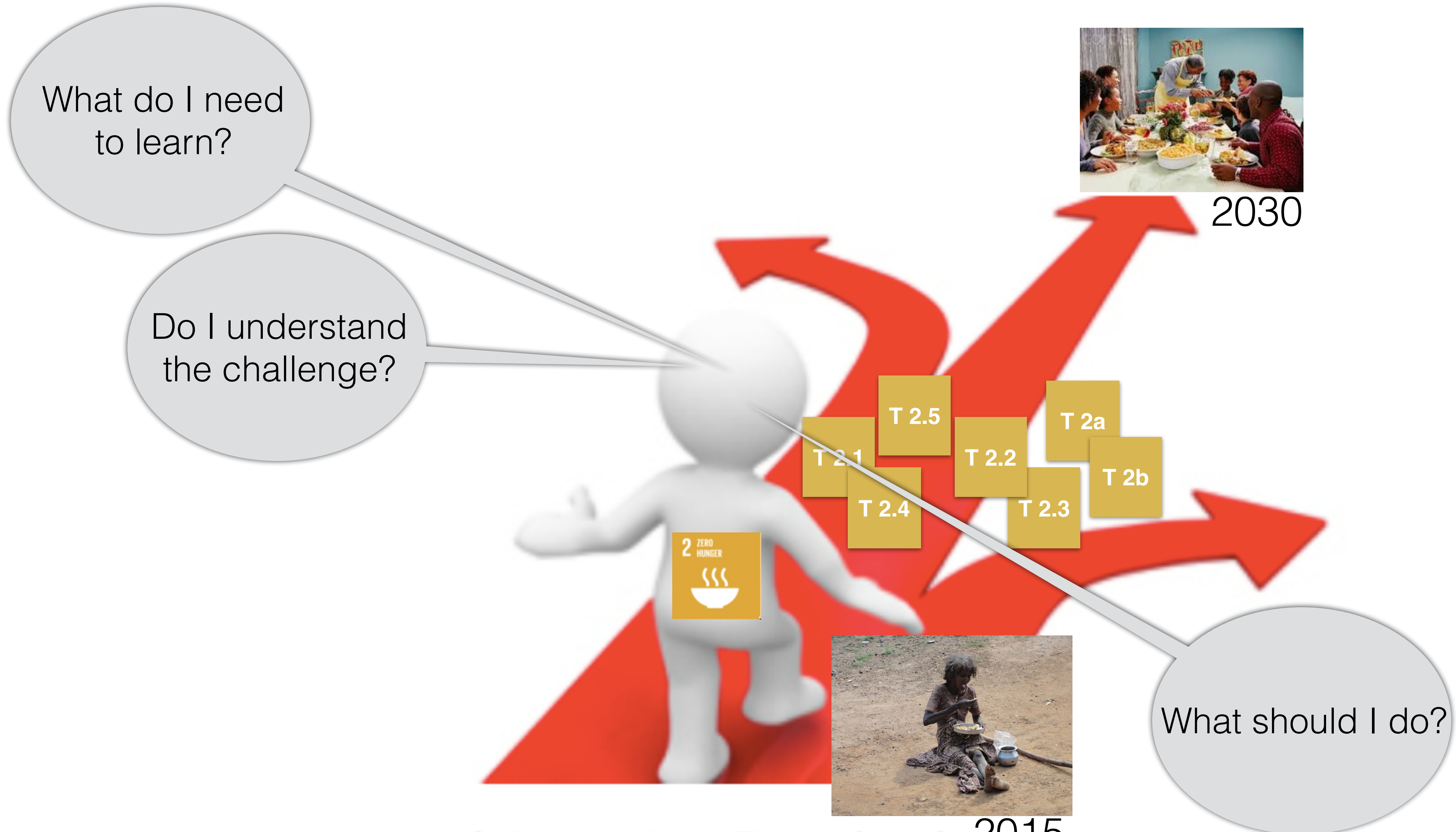


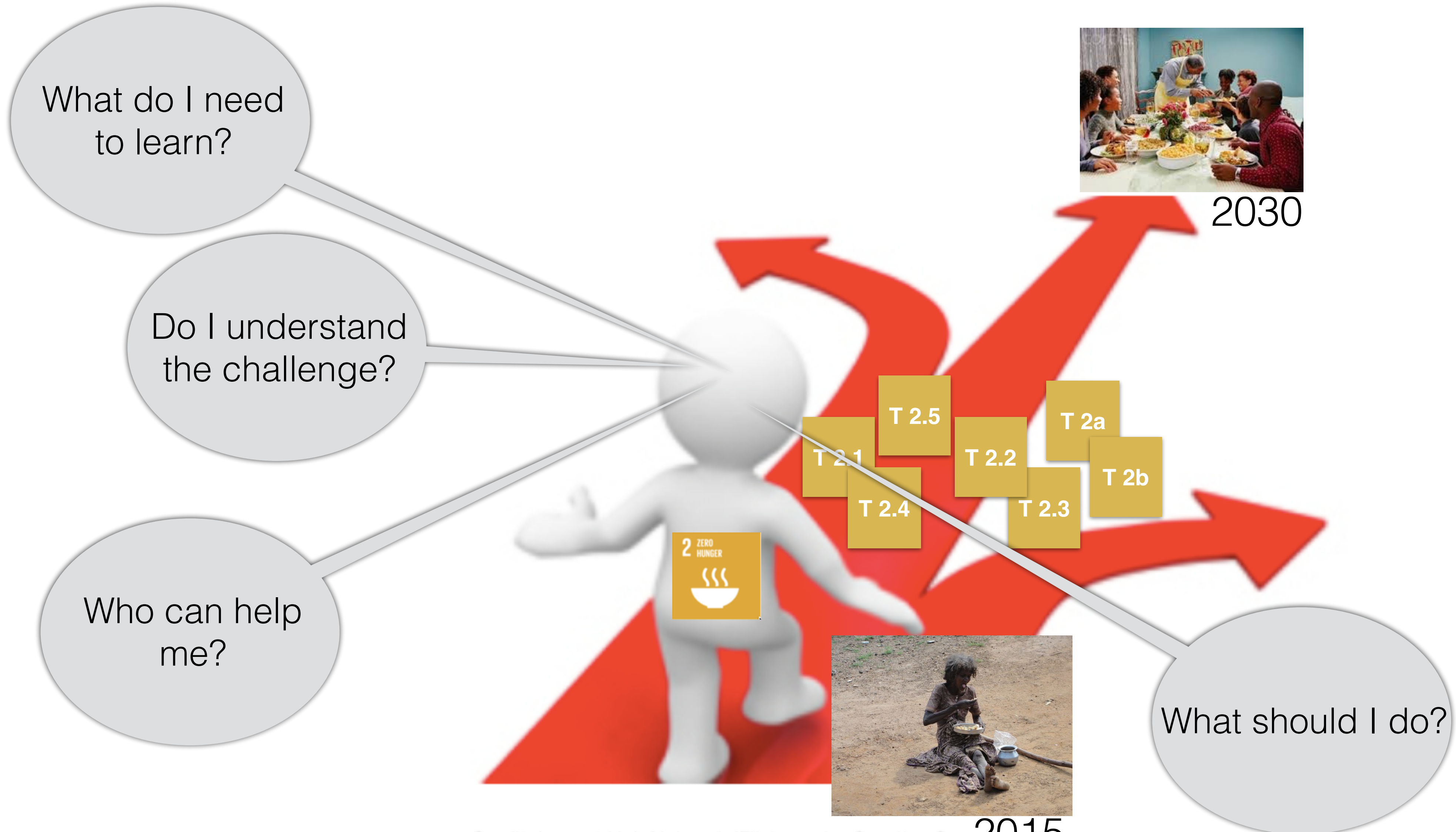
2030

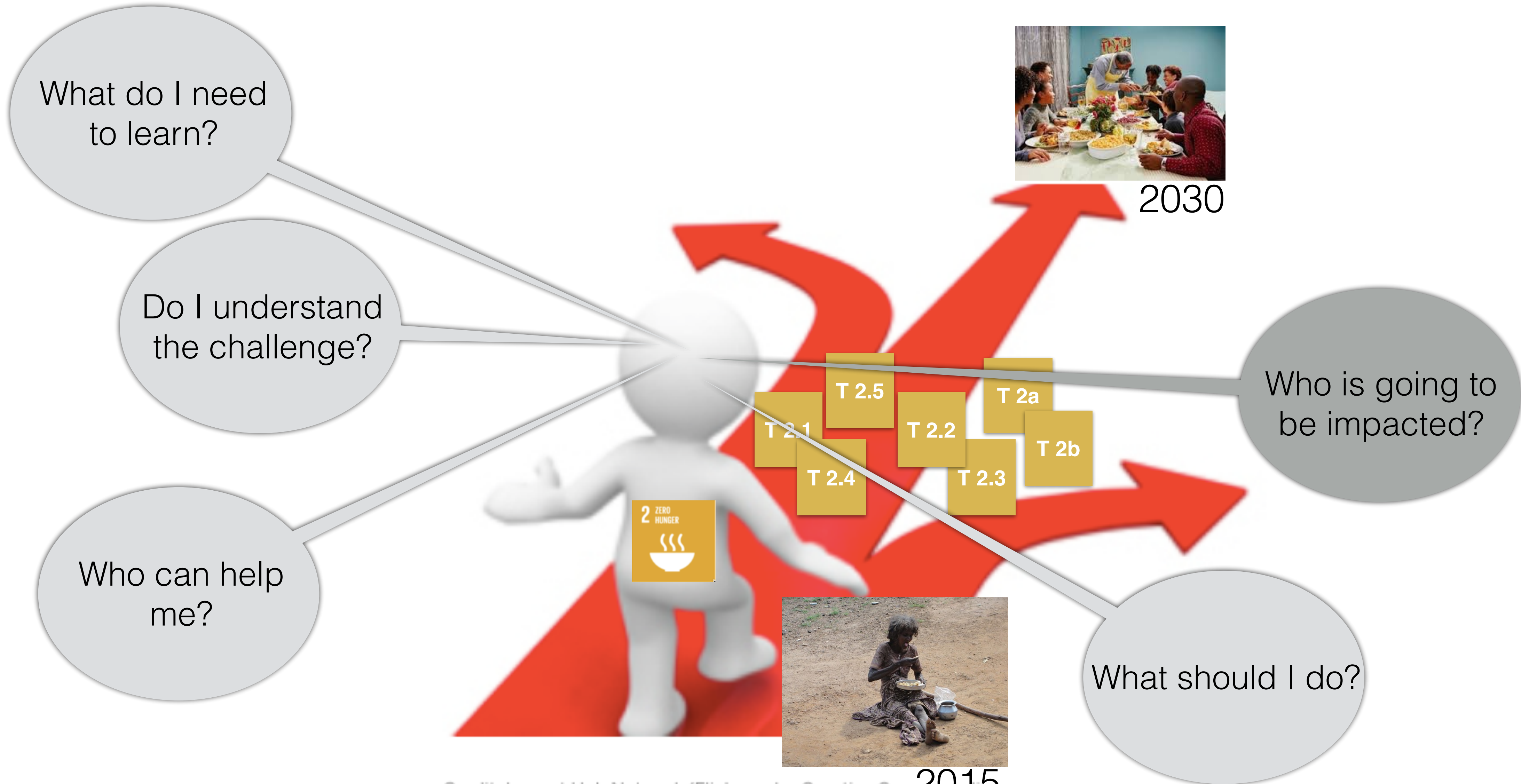


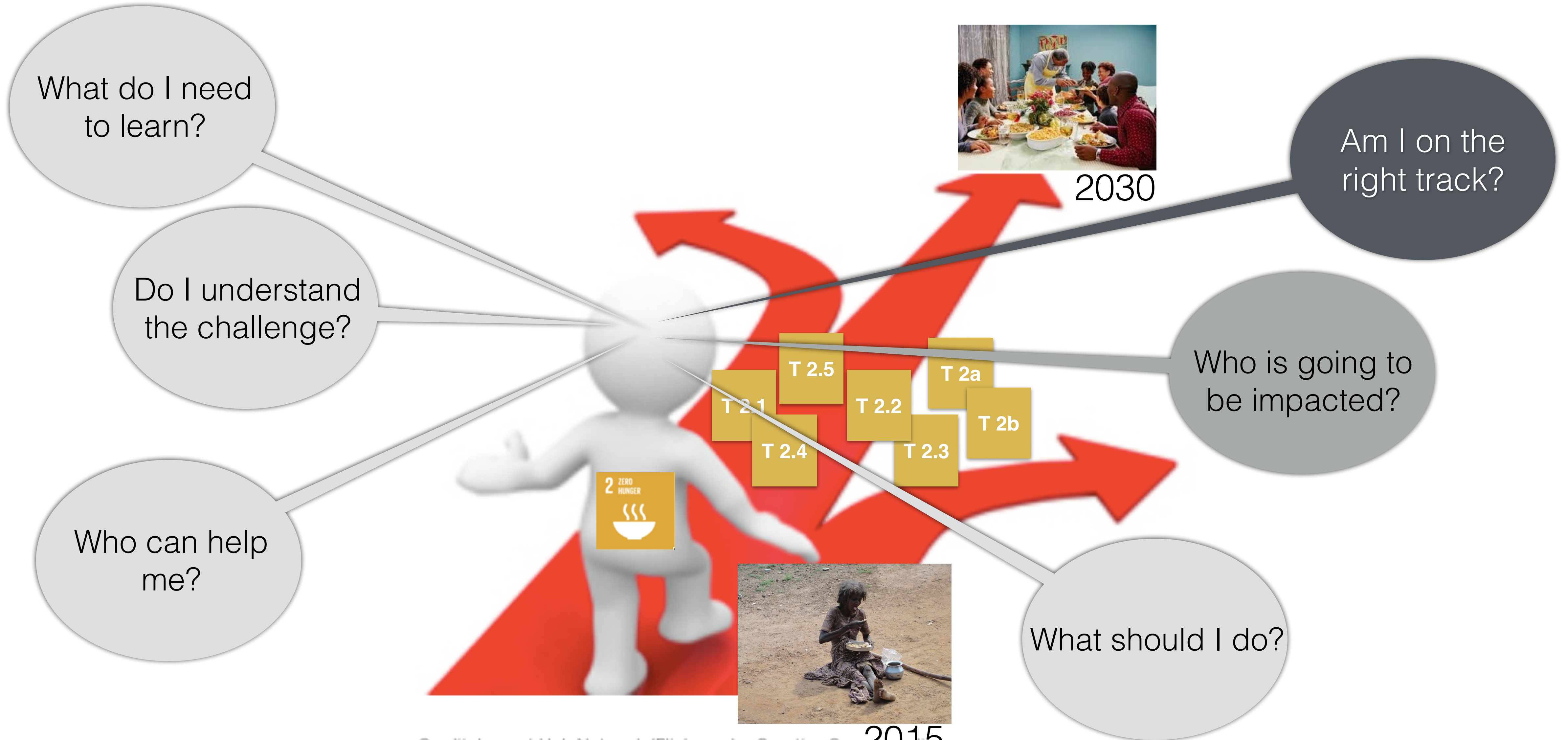
2015







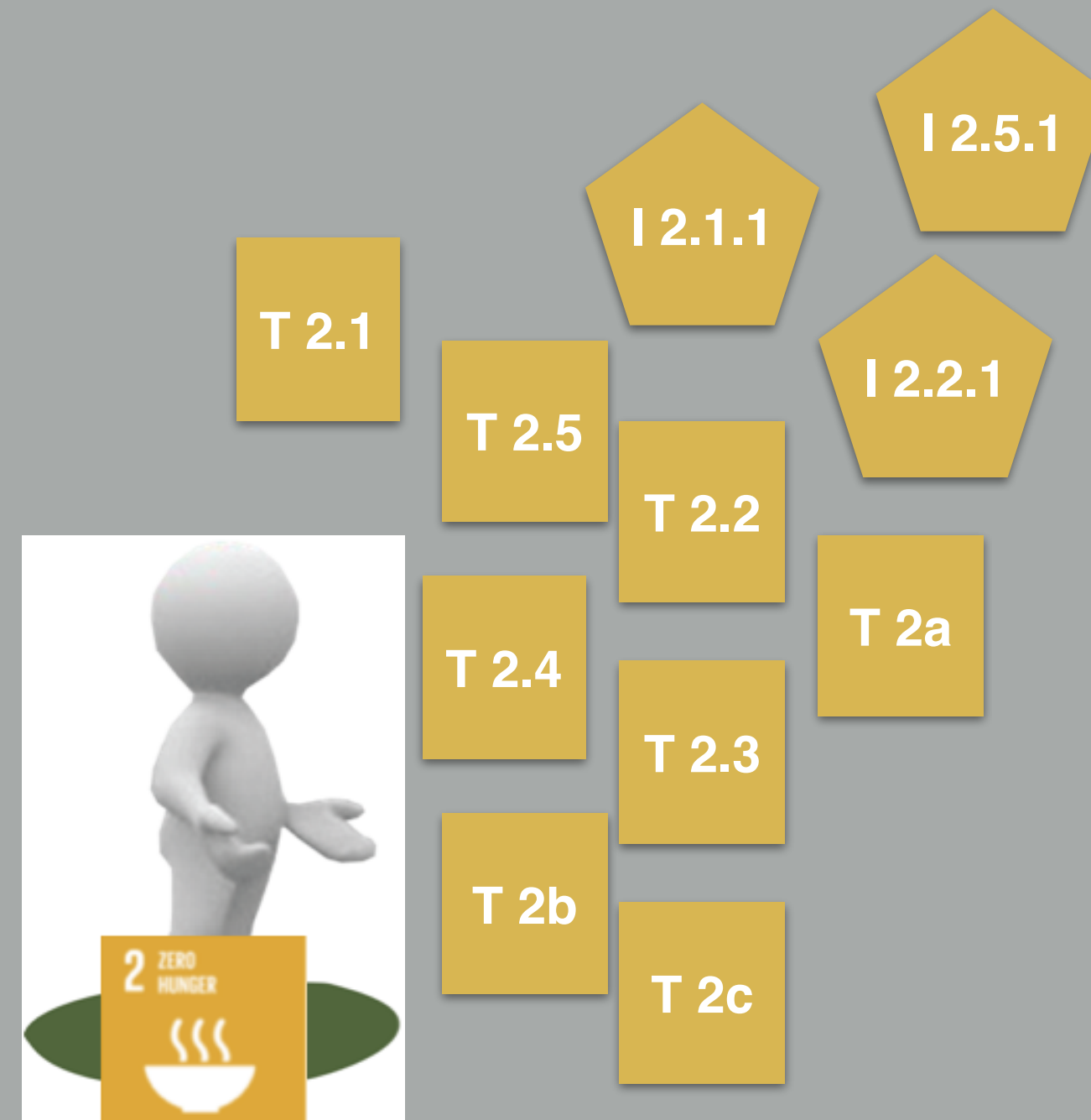






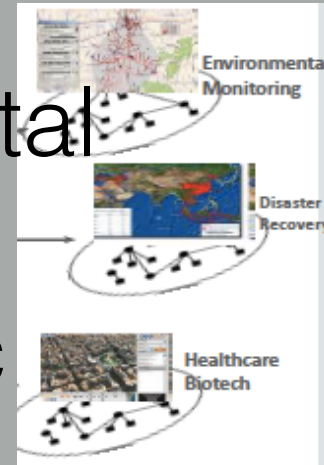
## Polyglot Data

Environmental  
Social  
Economic



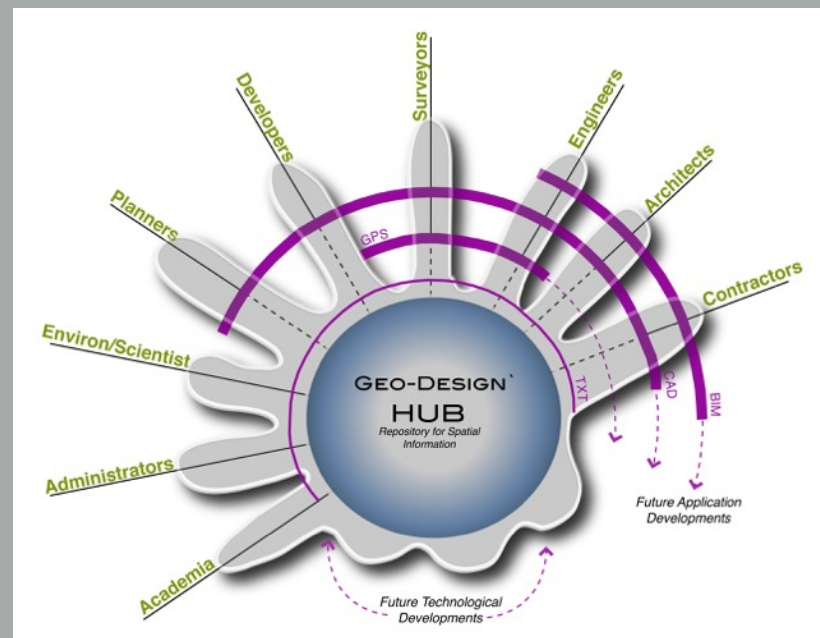
## Polyglot Data

Environmental  
Social  
Economic



**SEE-IN KB**

Tools  
**GCI**



T 2.1

T 2.5

T 2.4

T 2b

I 2.1.1

T 2.2

T 2.3

T 2c

T 2a

I 2.2.1

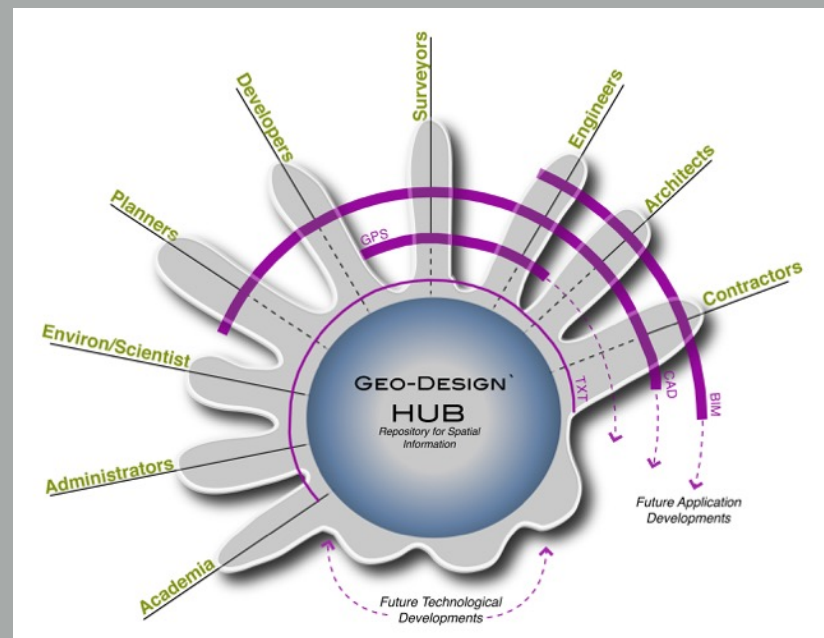
I 2.5.1

## Polyglot Data

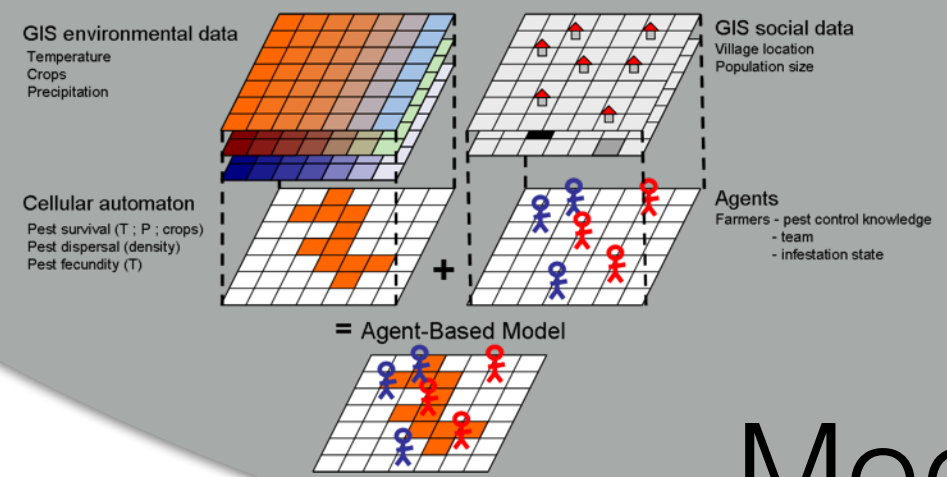
Environmental  
Social  
Economic



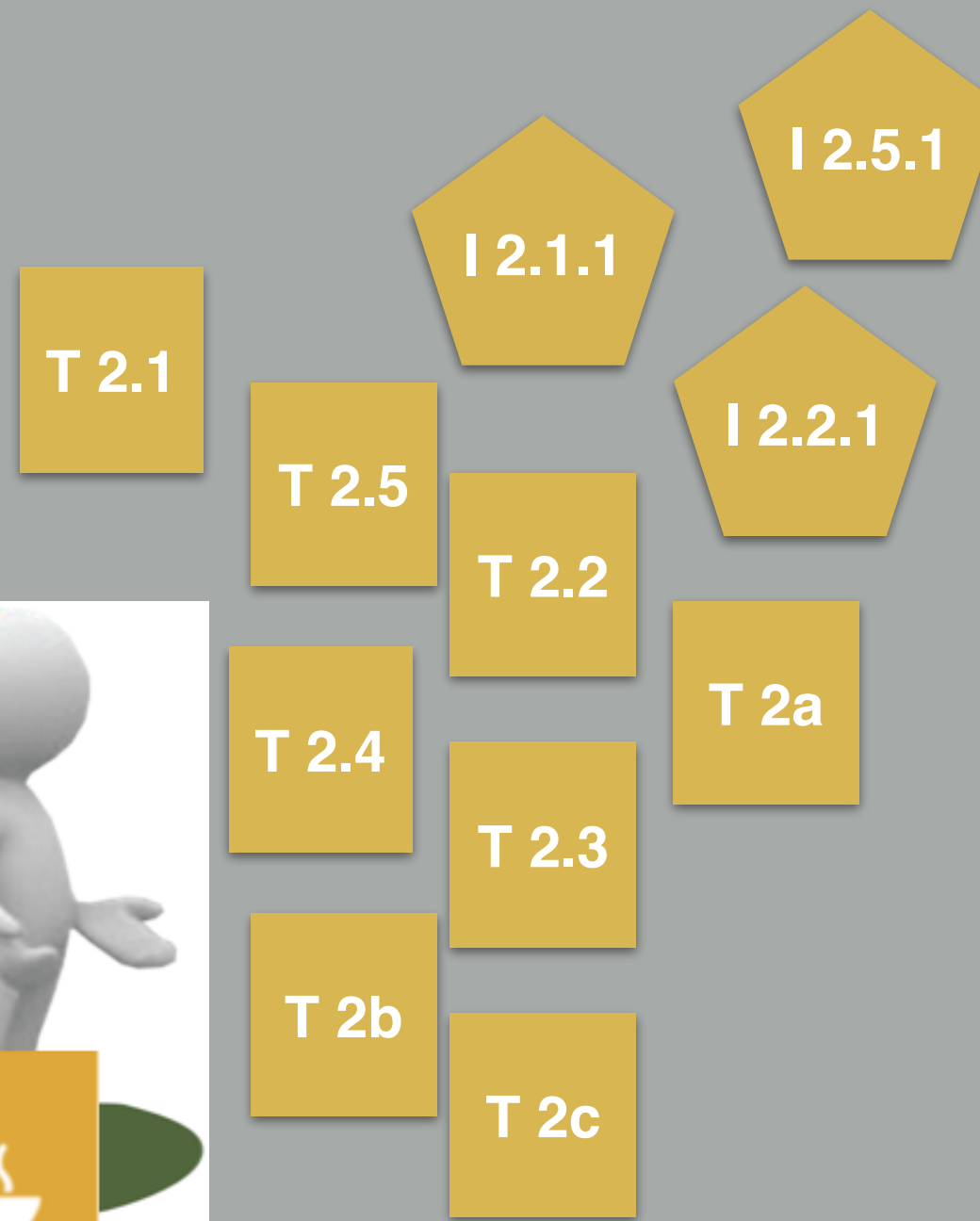
**SEE-IN KB**



Tools  
**GCI**



Models

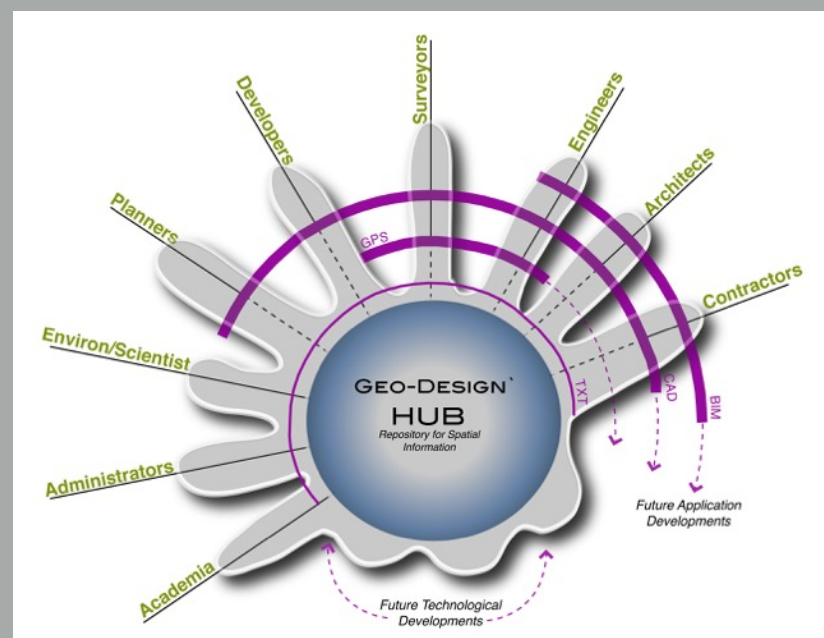


## Polyglot Data

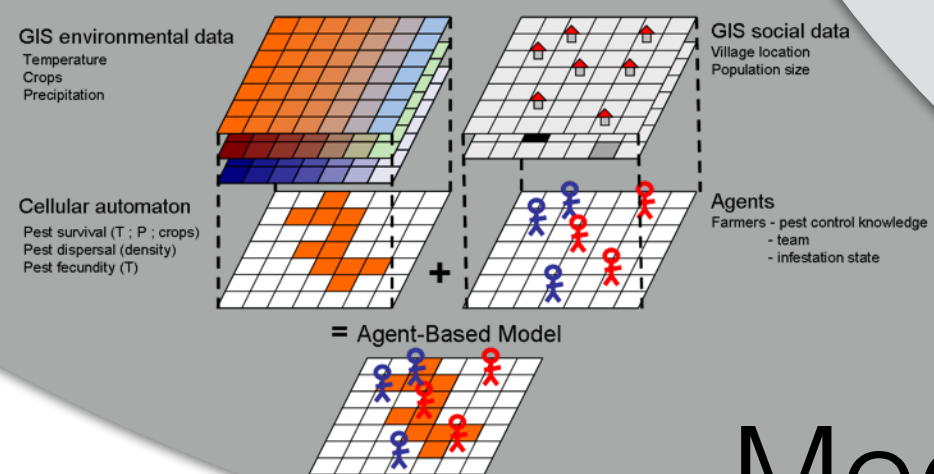
Environmental  
Social  
Economic



SEE-IN KB



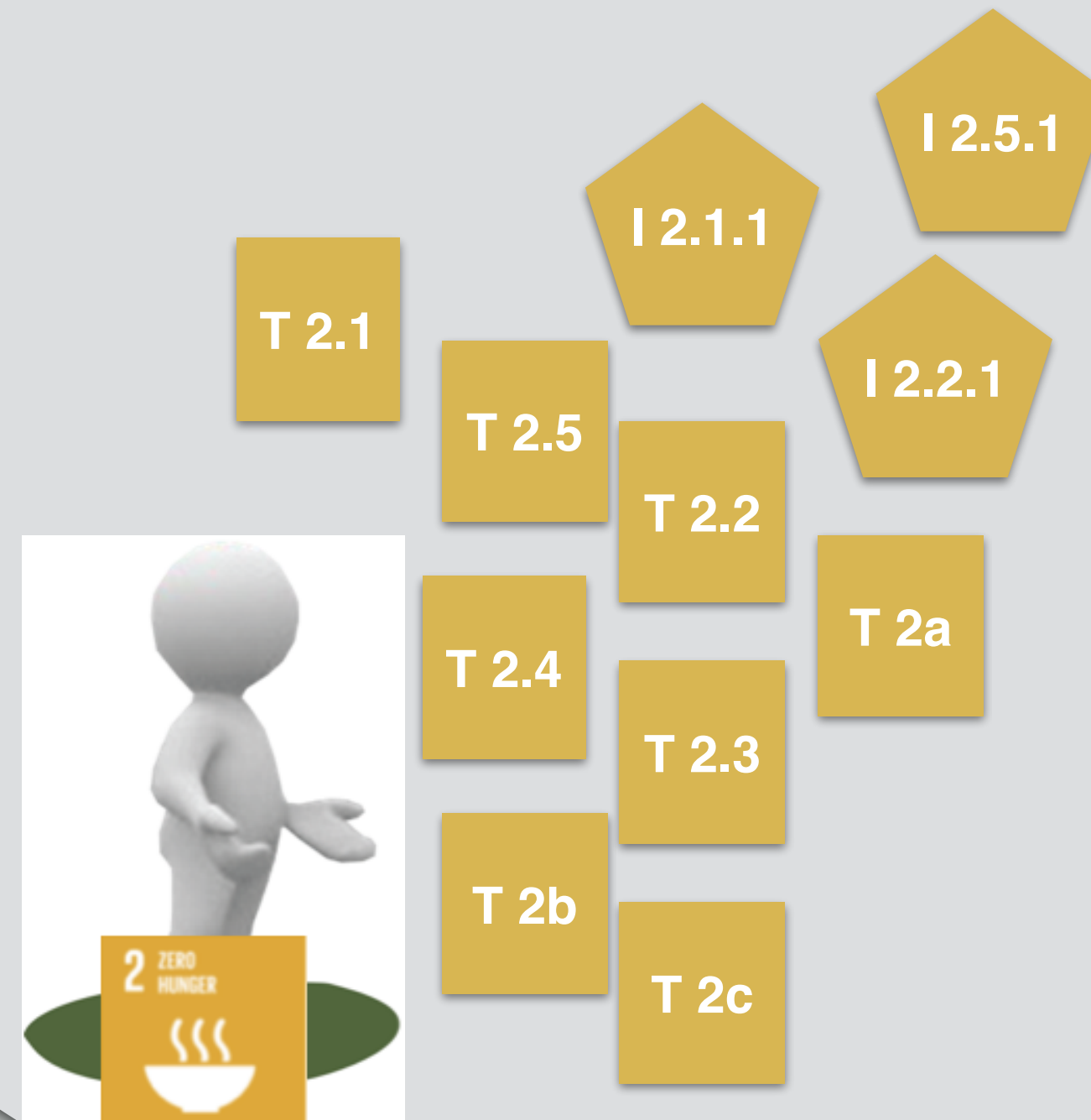
Tools  
GCI



## Models

## Graphs:

“social” networks  
among SDGs, Targets, Indicators, data. models, people



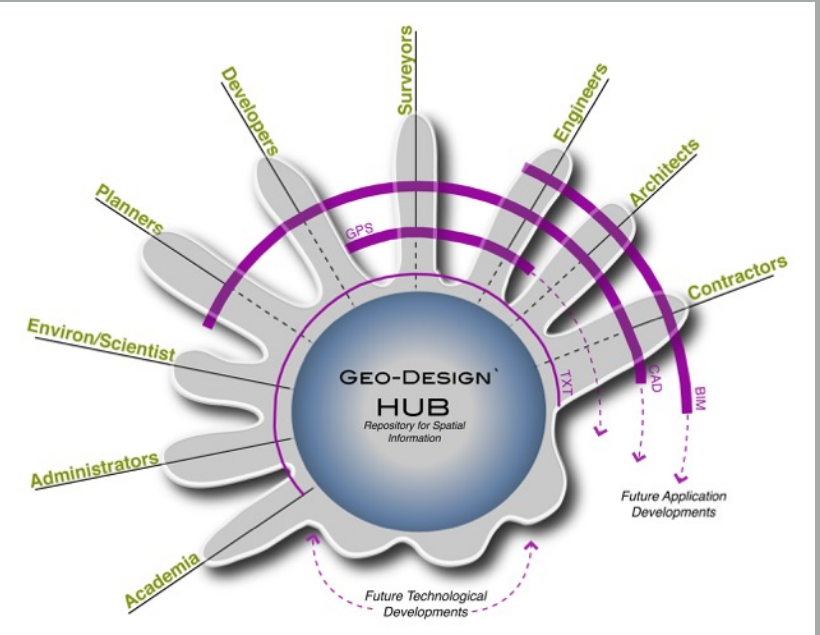
# Knowledge Base for Successful SDGs

## Polyglot Data

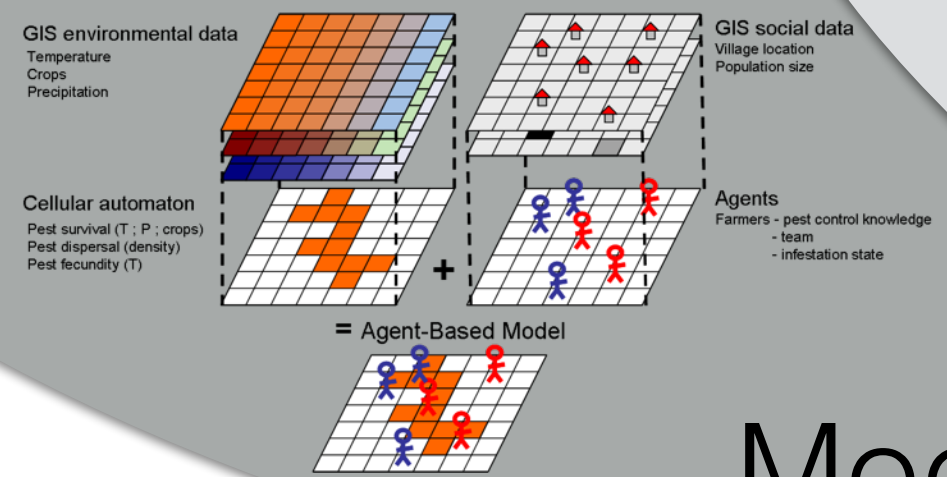
Environmental  
Social  
Economic



SEE-IN KB



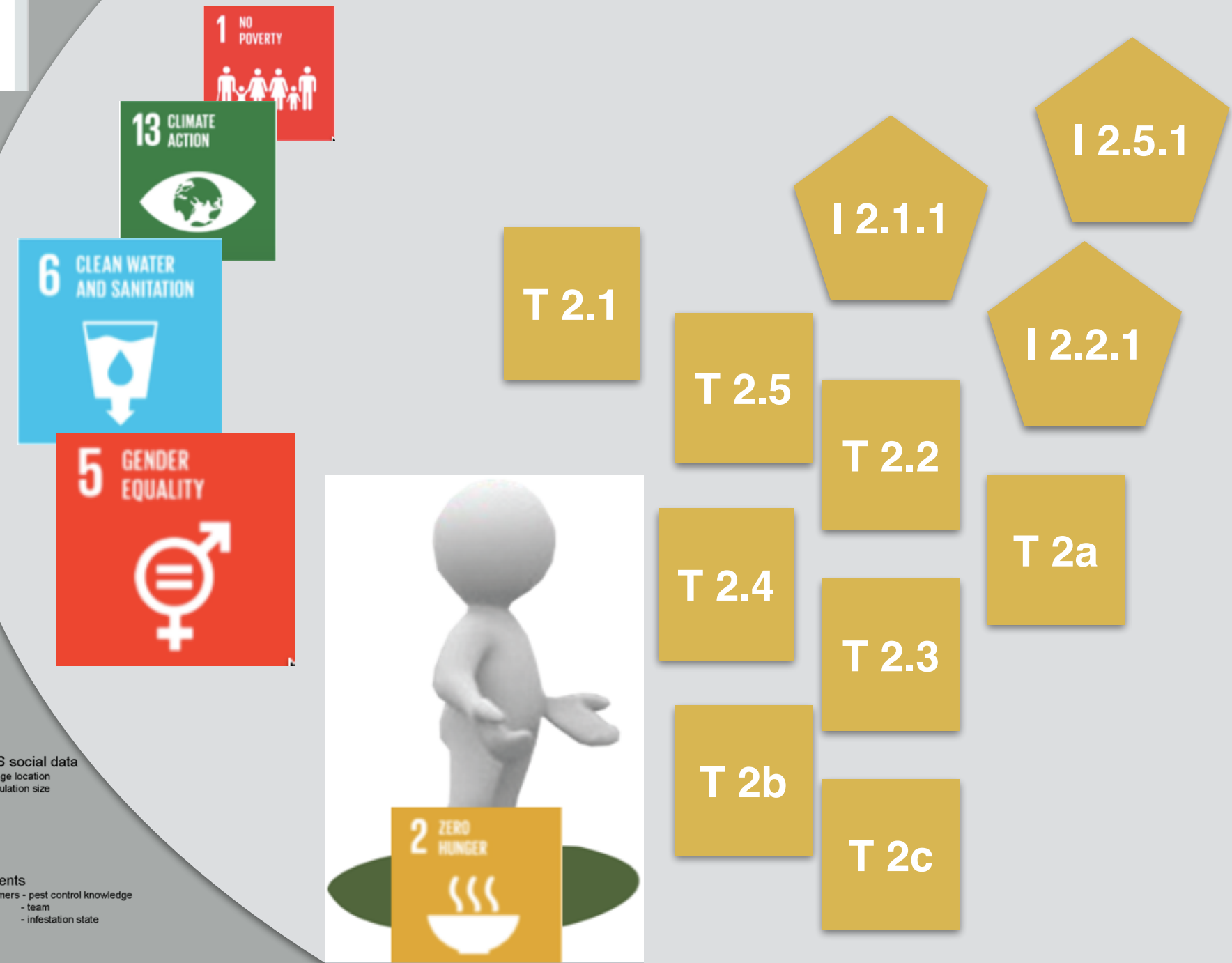
Tools  
GCI



## Models

## Graphs:

“social” networks  
among SDGs, Targets, Indicators, data. models, people



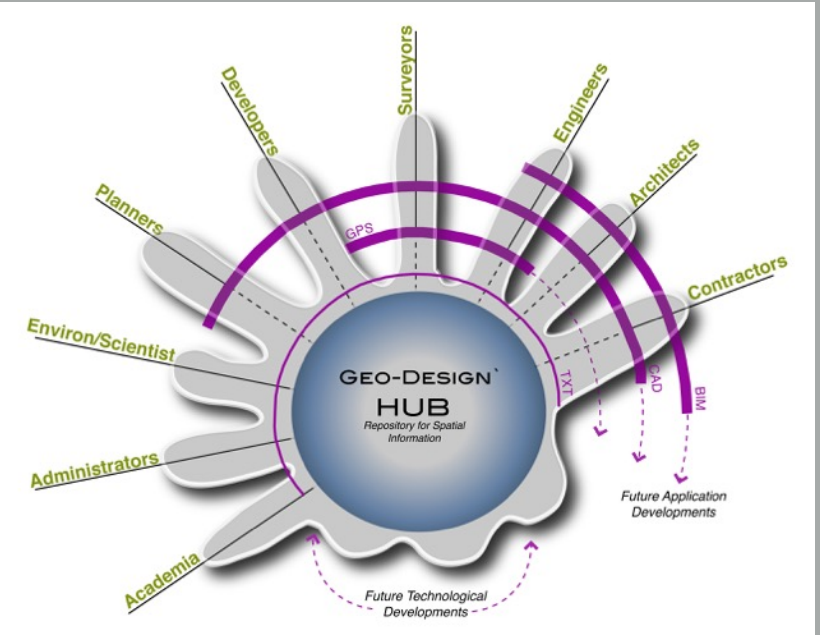
# Knowledge Base for Successful SDGs

## Polyglot Data

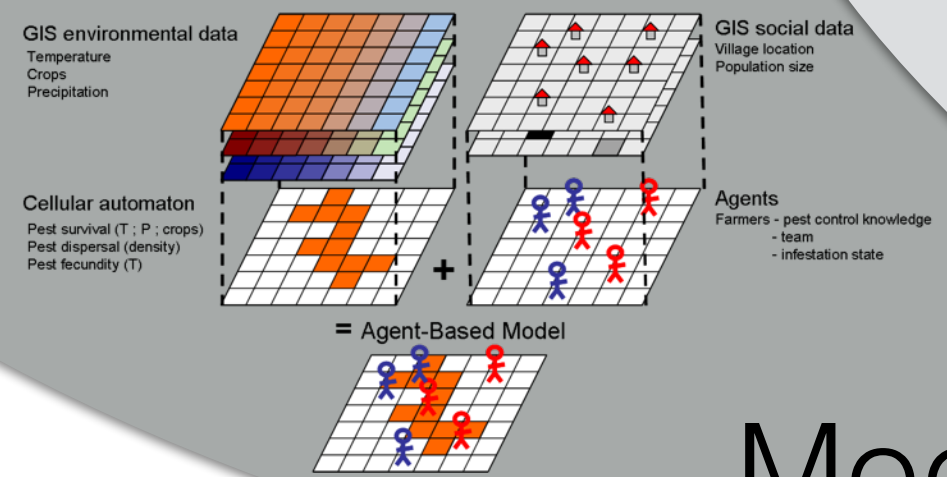
Environmental  
Social  
Economic



SEE-IN KB



Tools  
GCI

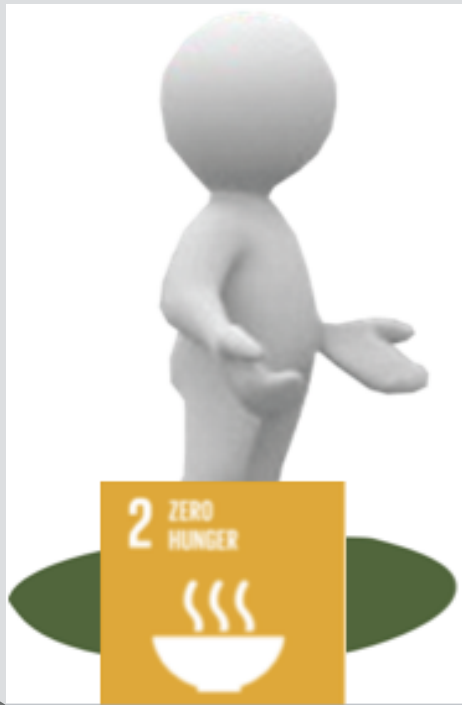


## Models

## Graphs:

“social” networks

among SDGs, Targets, Indicators, data, models, people



T 2.1

T 2.5

T 2.4

T 2b

I 2.1.1

T 2.2

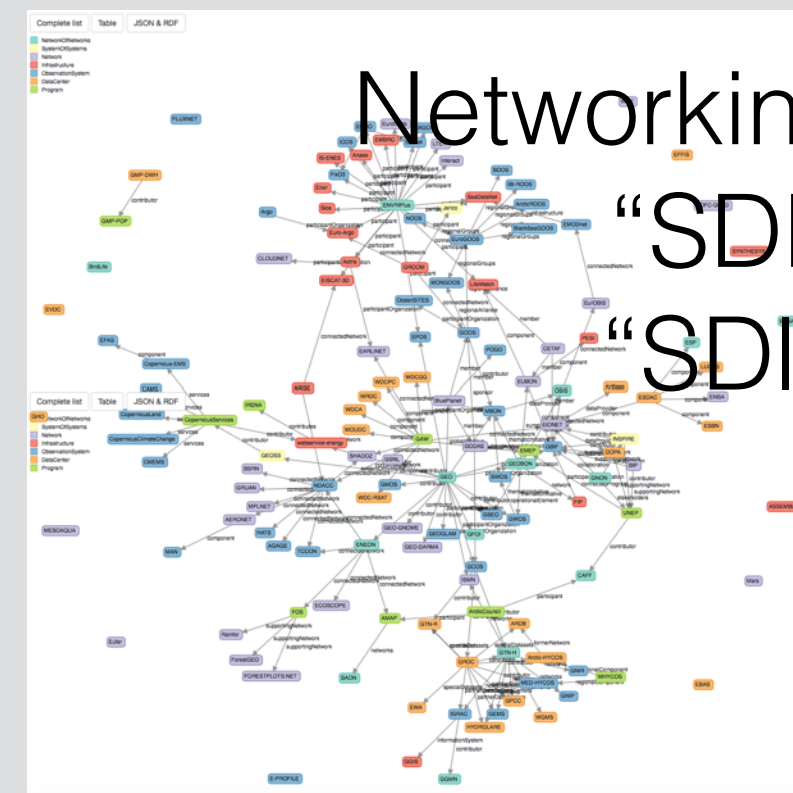
T 2.3

T 2c

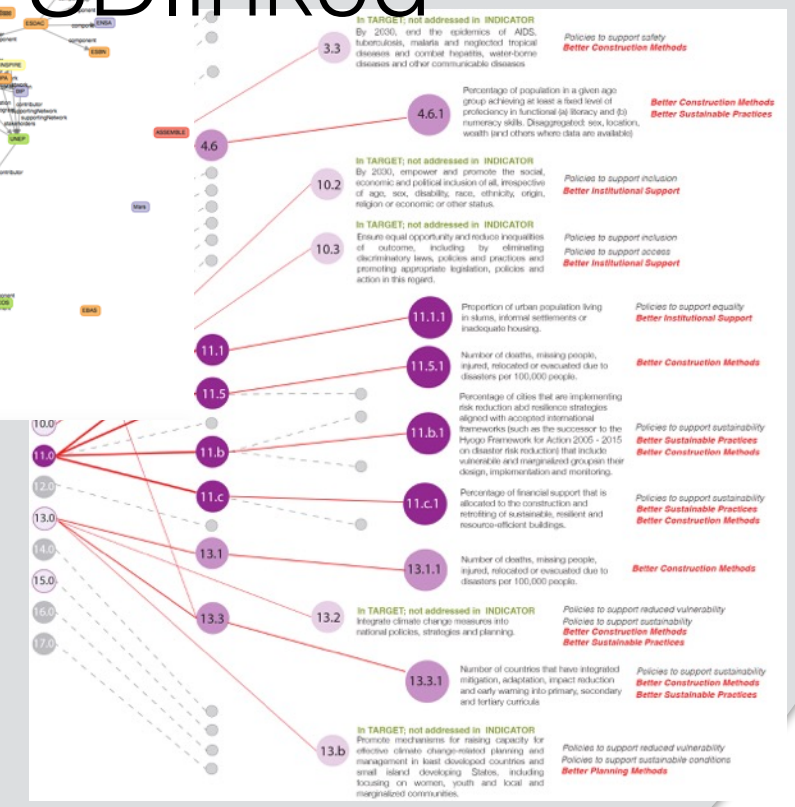
I 2.2.1

T 2a

I 2.5.1



Networking for SDGs:  
“SDbook”,  
“SDlinked”



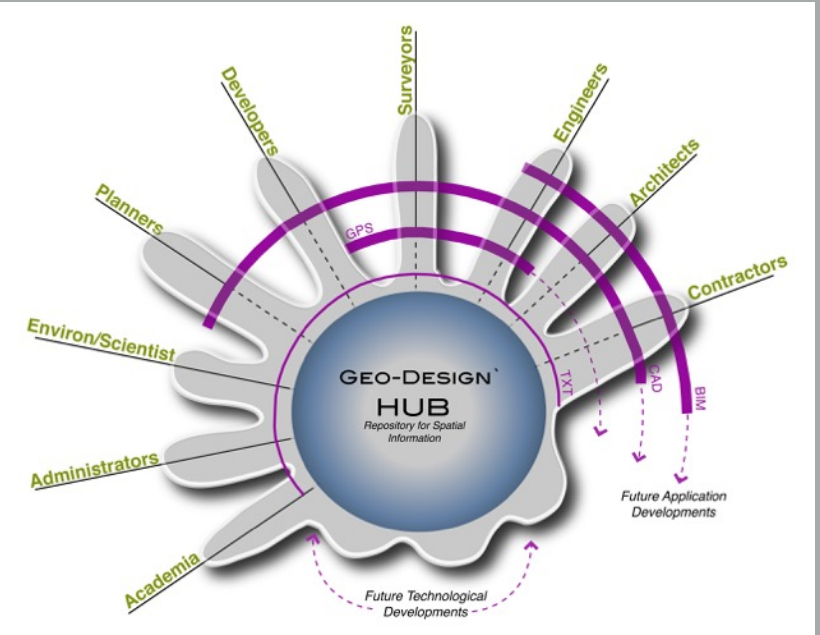
# Knowledge Base for Successful SDGs

## Polyglot Data

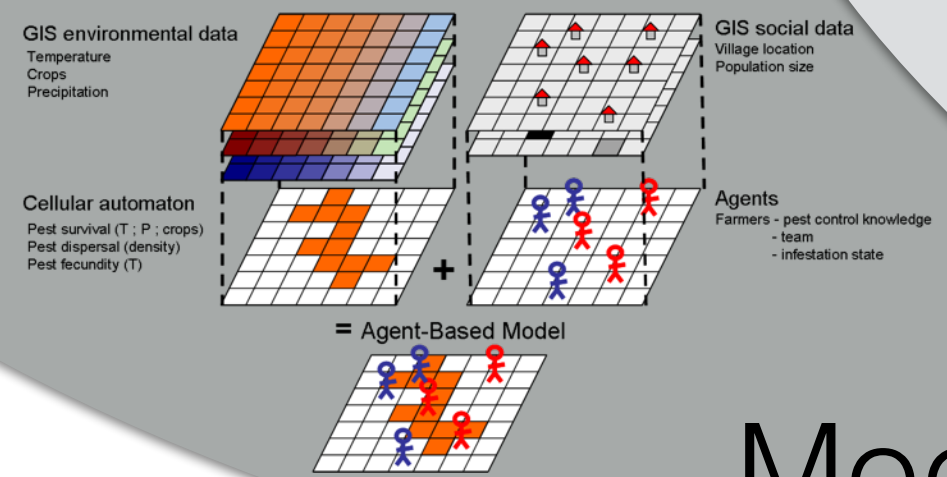
Environmental  
Social  
Economic



**SEE-IN KB**



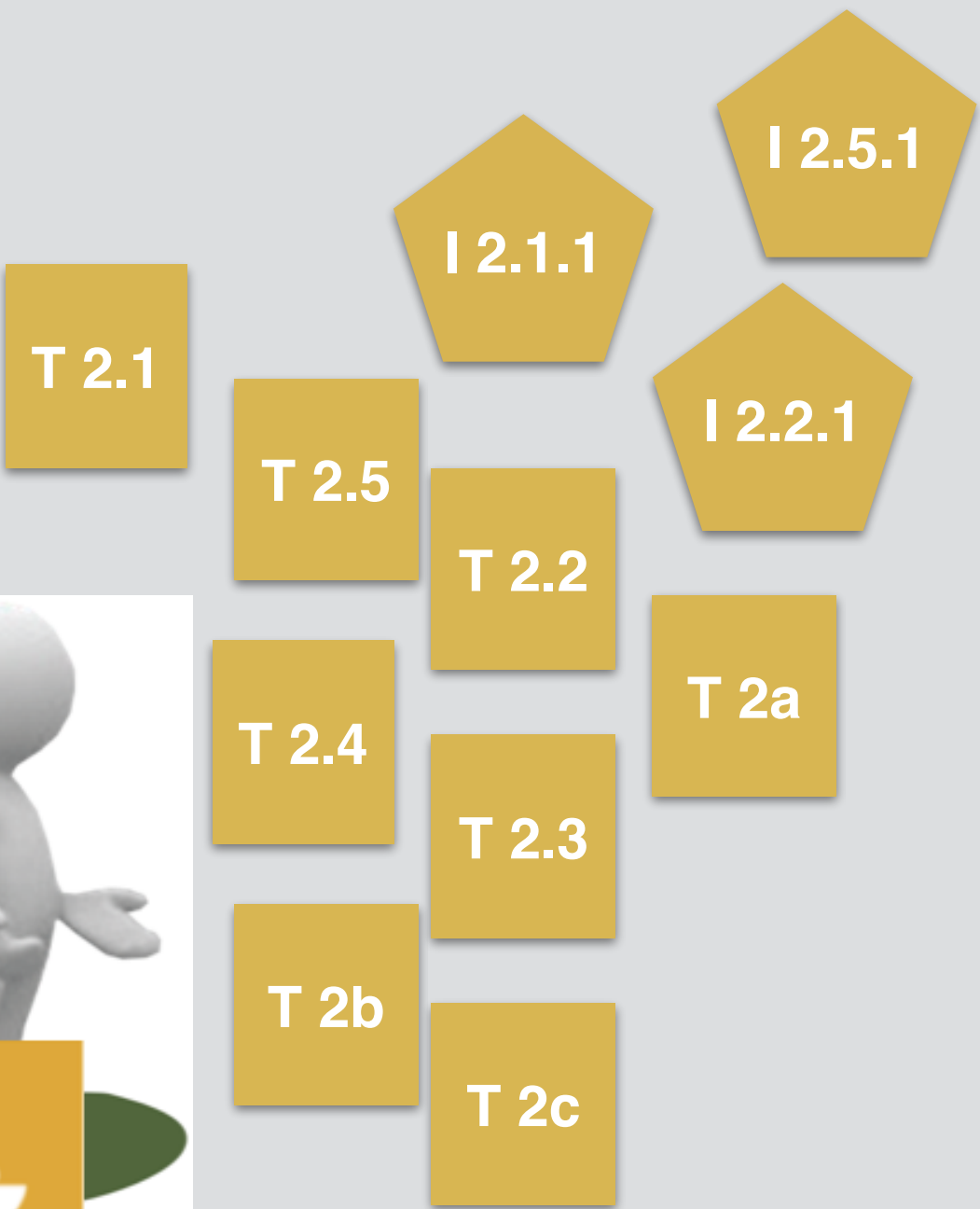
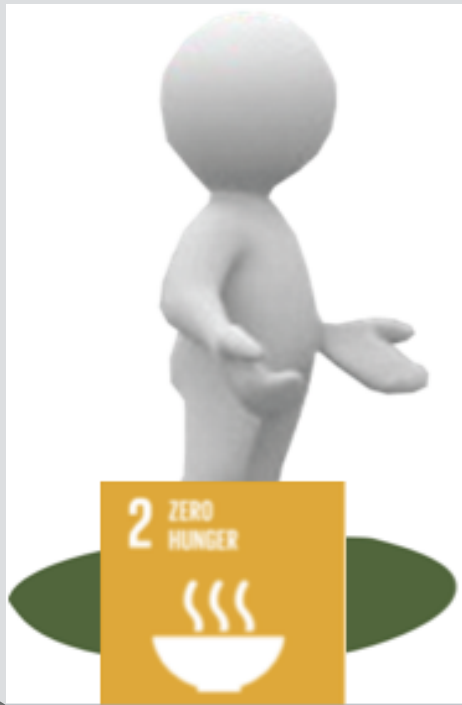
Tools  
**GCI**



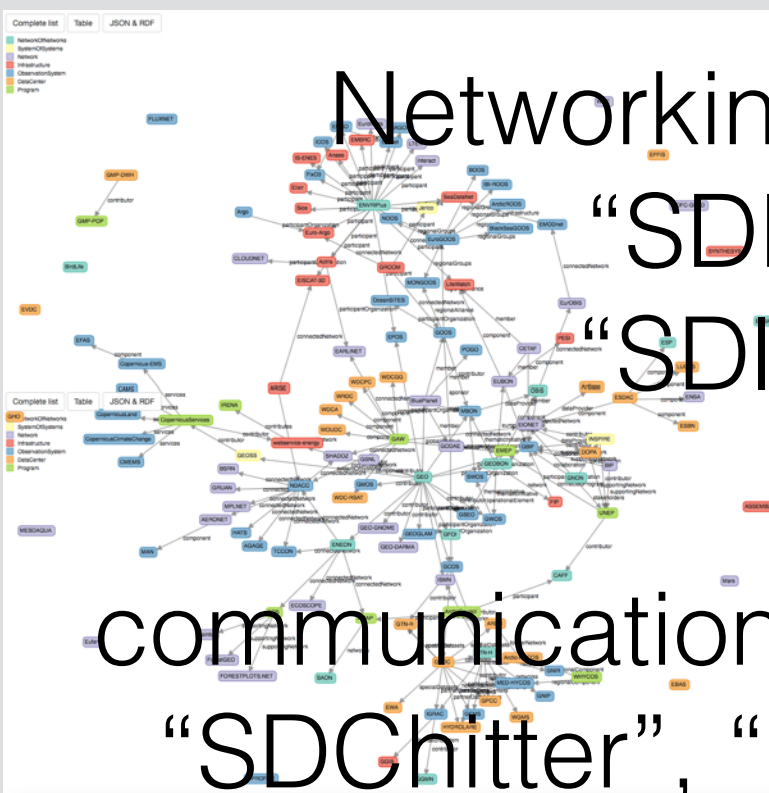
## Models

## Graphs:

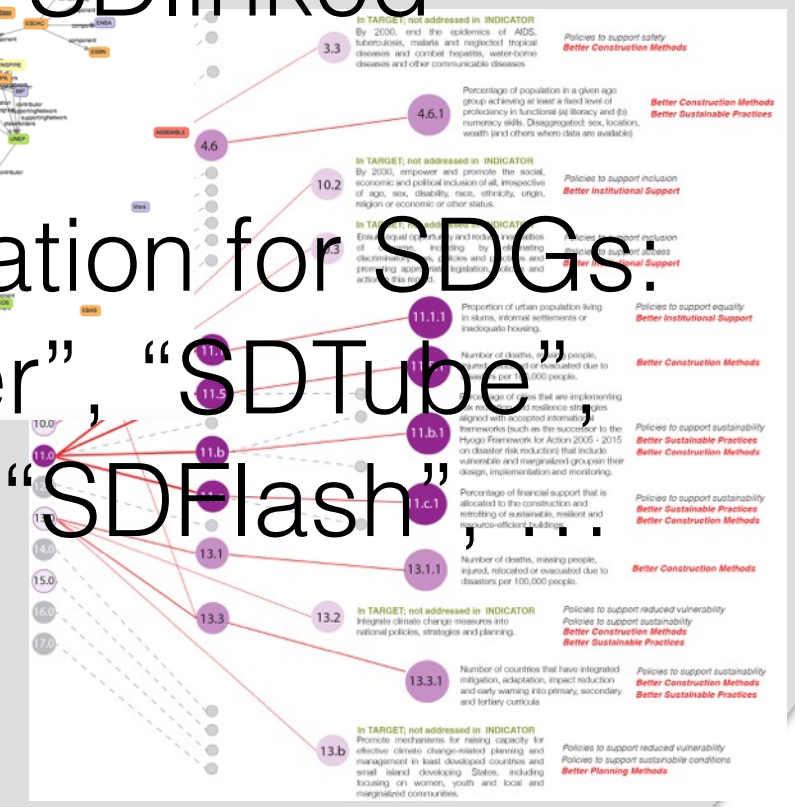
“social” networks  
among SDGs, Targets, Indicators, data, models, people



Networking for SDGs:  
“SDbook”,  
“SDlinked”



communication for SDGs:  
“SDChitter”, “SDTube”,  
“SDBox”, “SDflash”



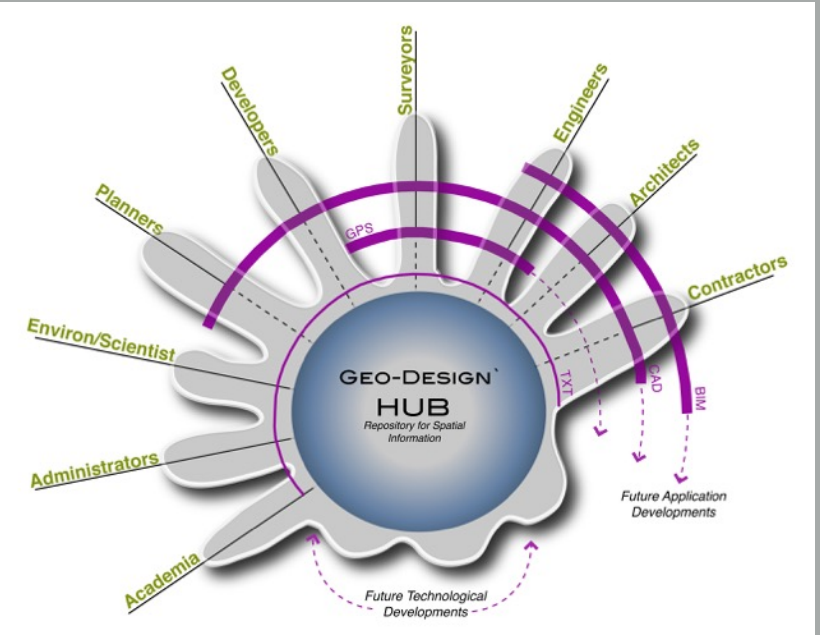
# Knowledge Base for Successful SDGs

## Polyglot Data

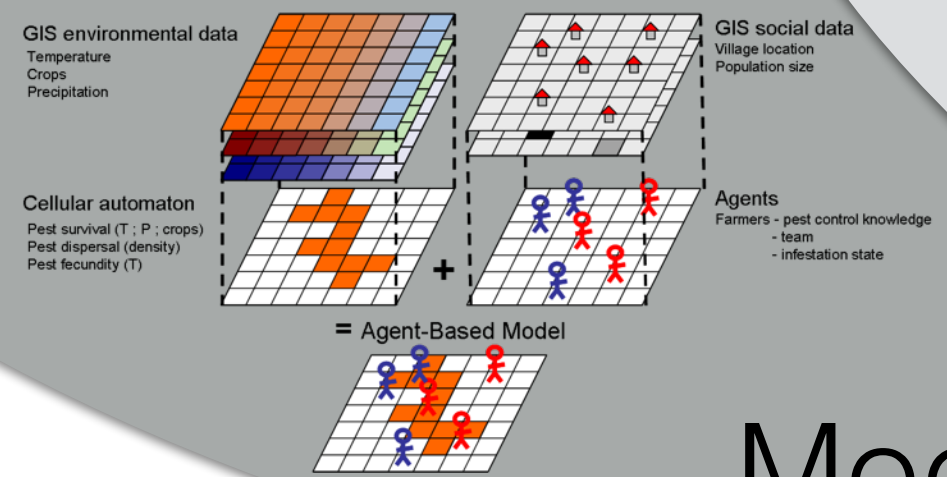
Environmental  
Social  
Economic



SEE-IN KB



Tools  
GCI

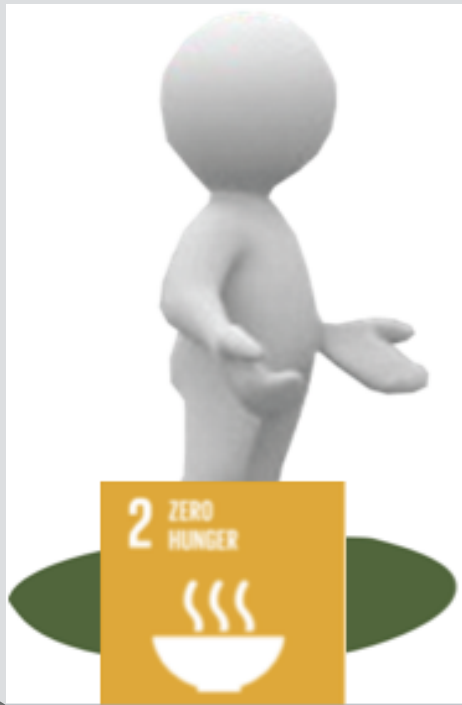


## Models

## Graphs:

“social” networks

among SDGs, Targets, Indicators, data, models, people



T 2.1

T 2.5

T 2.4

T 2b

I 2.1.1

T 2.2

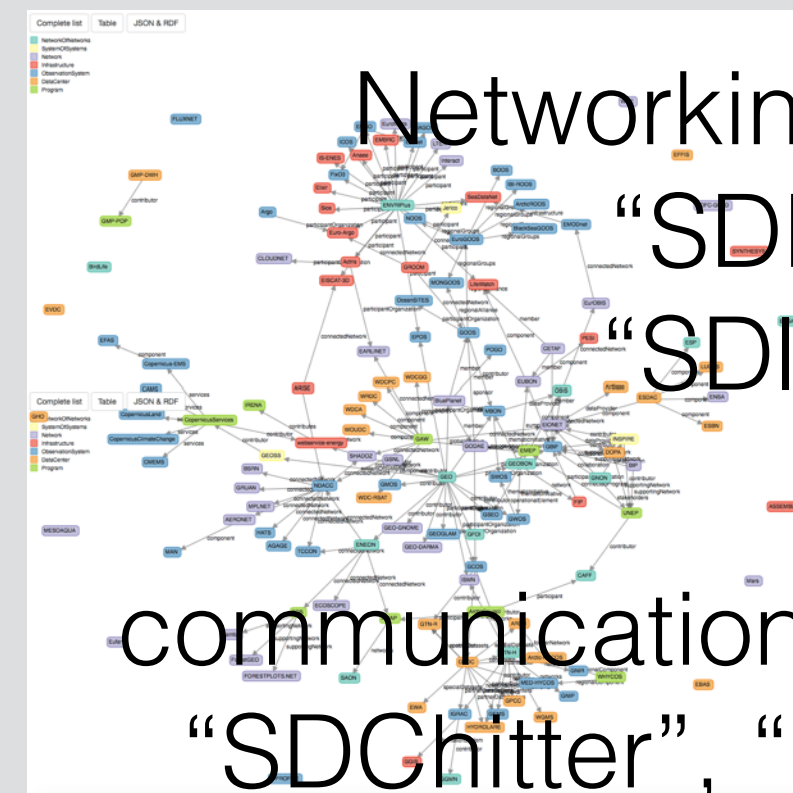
T 2.3

T 2c

I 2.2.1

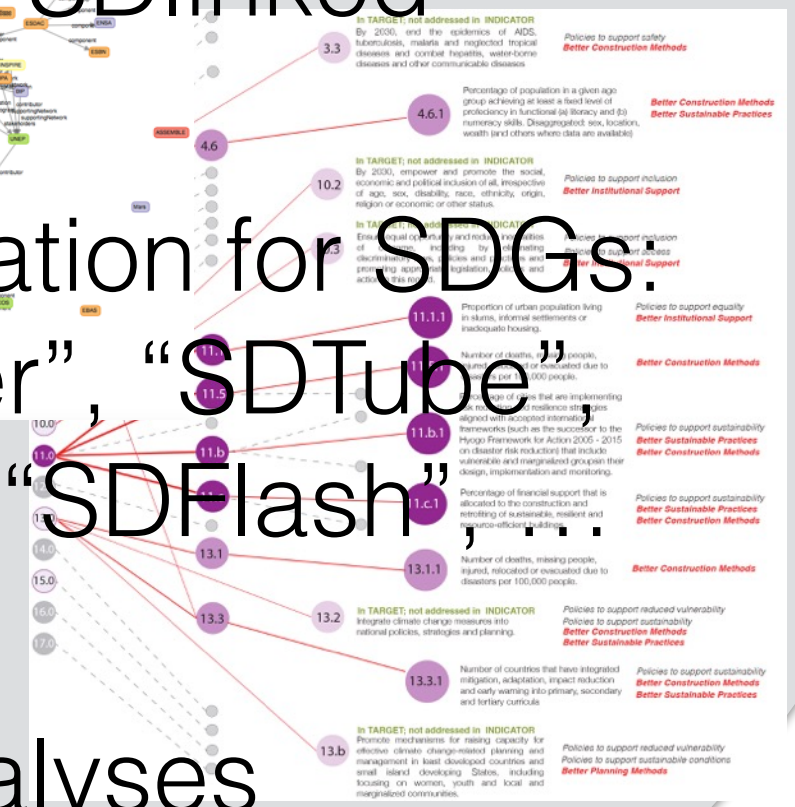
T 2a

I 2.5.1



Networking for SDGs:  
“SDbook”,  
“SDlinked”

communication for SDGs:  
“SDChitter”, “SDTube”,  
“SDBox”, “SDflash”



functional network analyses

gap analyses  
deep learning

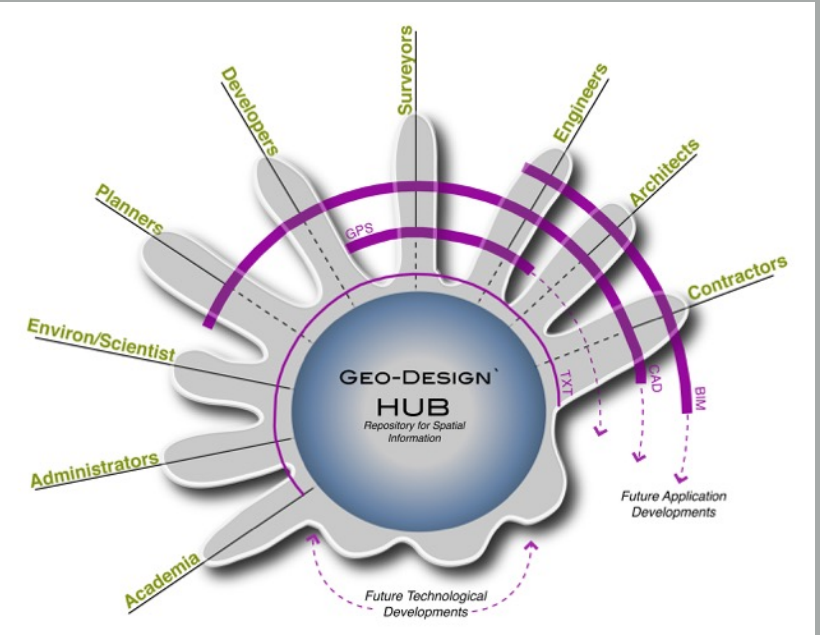
# Knowledge Base for Successful SDGs

## Polyglot Data

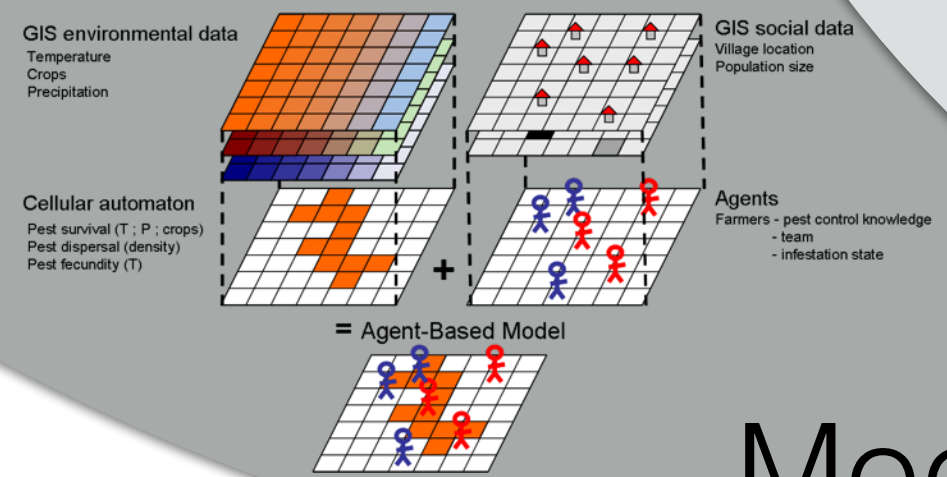
Environmental  
Social  
Economic



SEE-IN KB

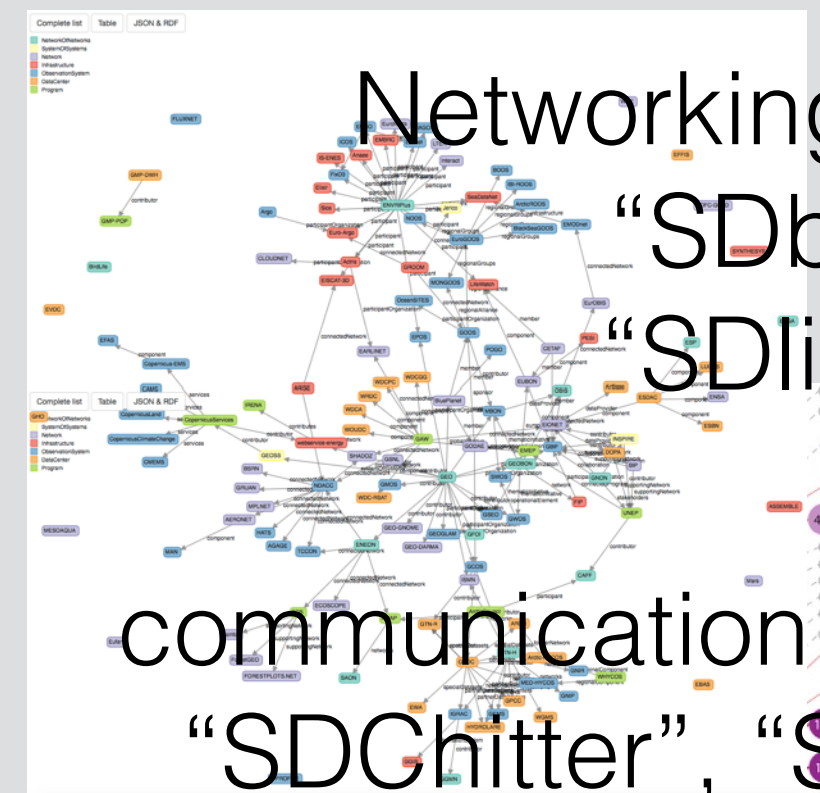
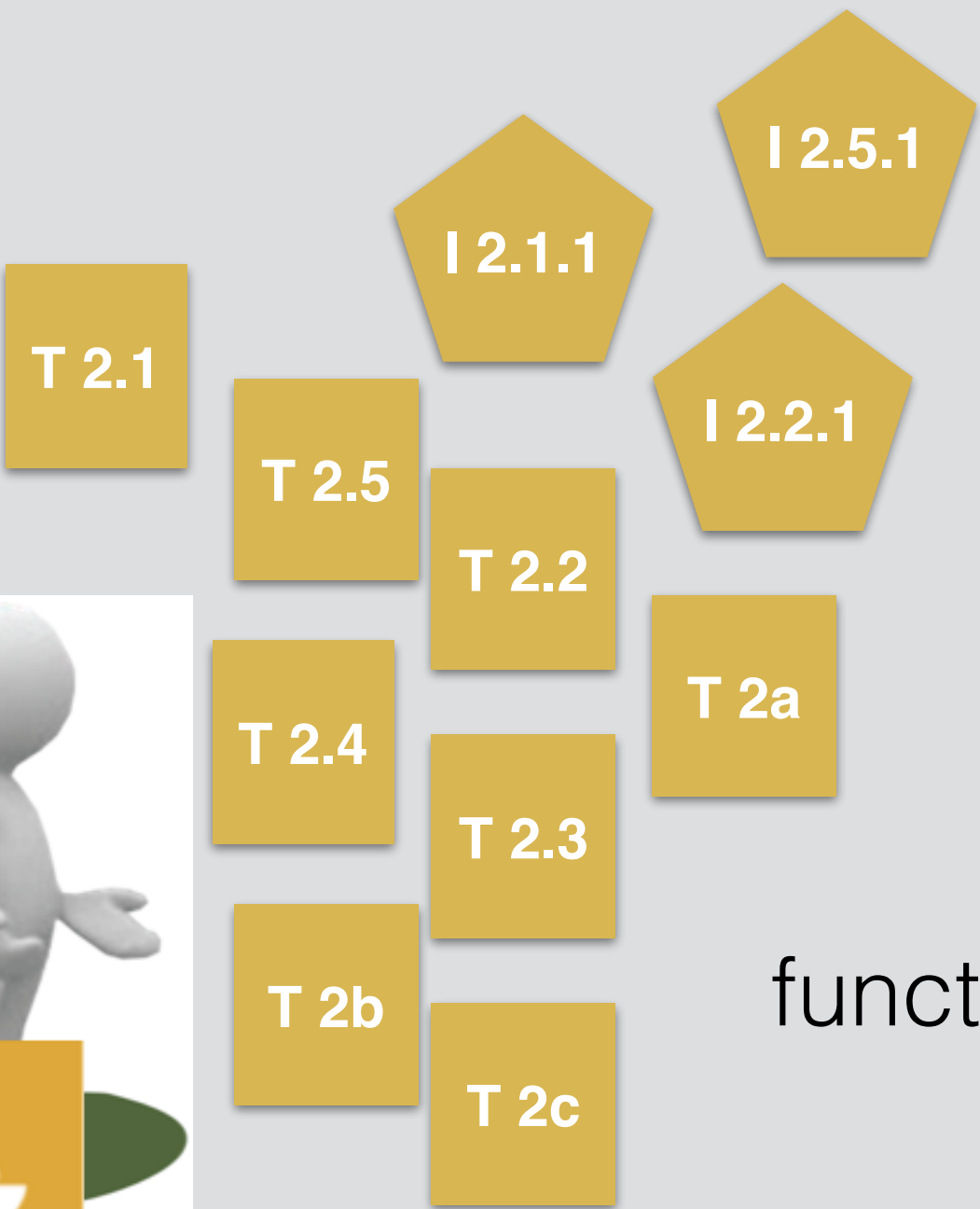
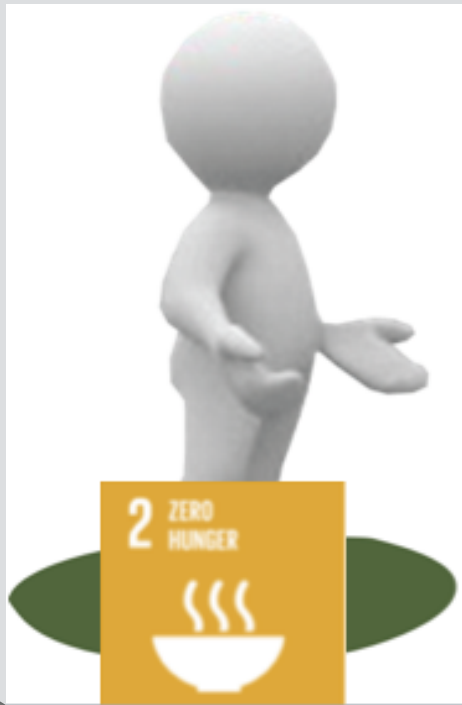


Tools  
GCI

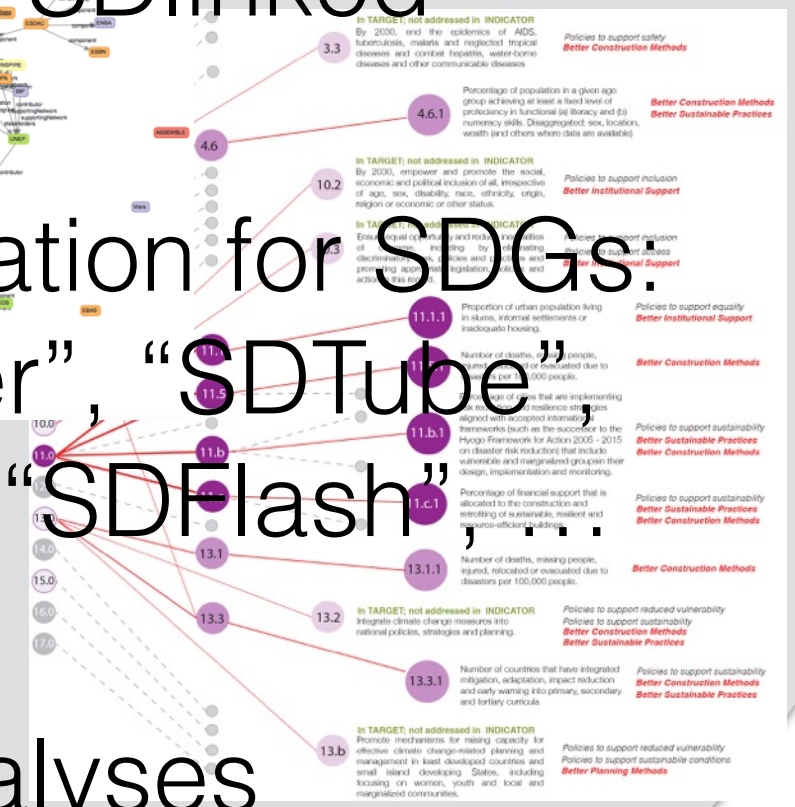


## Models

Graphs:  
“social” networks  
among SDGs, Targets, Indicators, data, models, people



Networking for SDGs:  
“SDbook”,  
“SDlinked”  
communication for SDGs:  
“SDChitter”, “SDTube”  
“SDBox”, “SDflash”



functional network analyses  
gap analyses  
deep learning

Toward a Better World for the SDGs .