

# Benefits and challenges of collaboration between research and industry

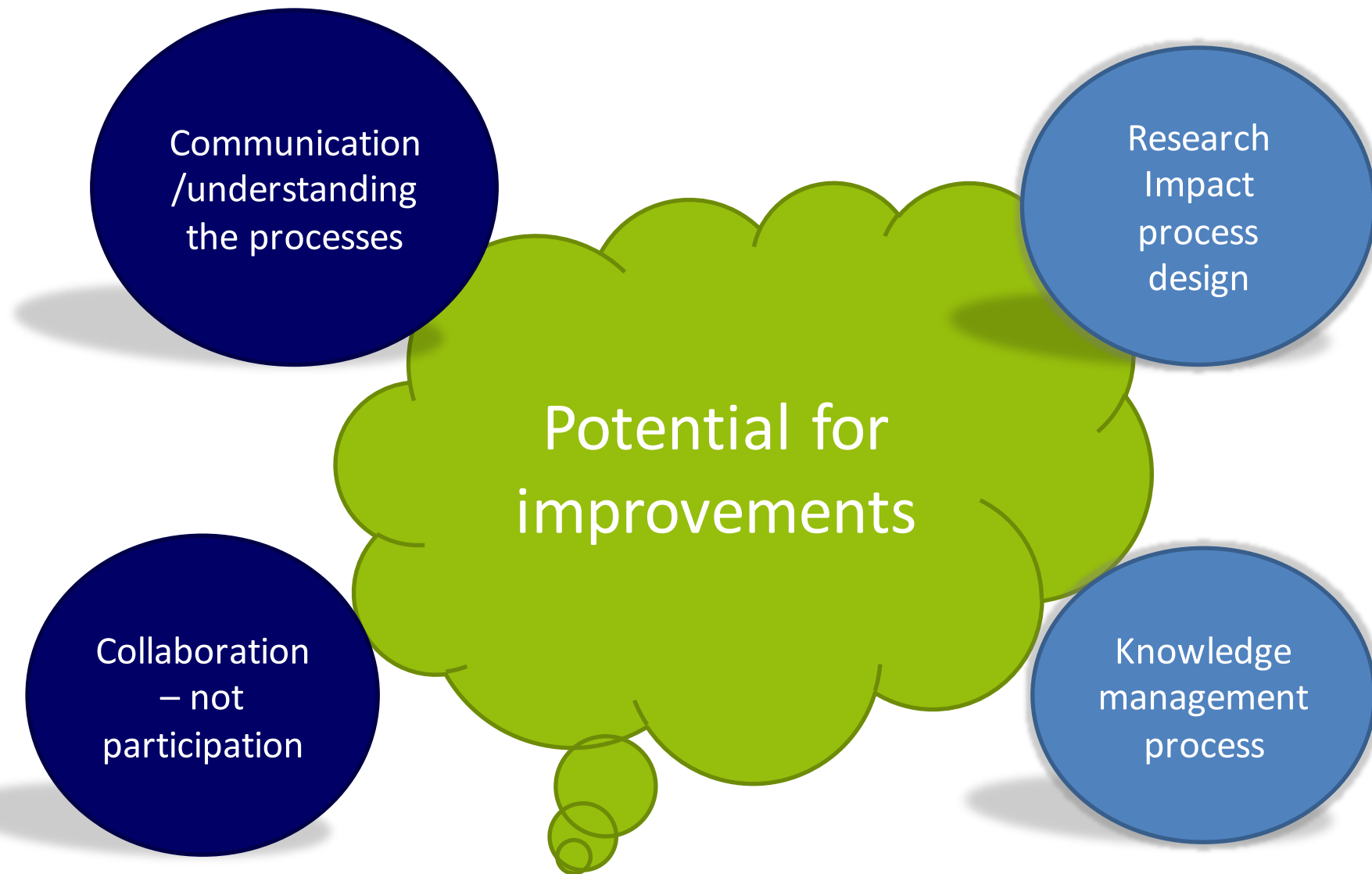
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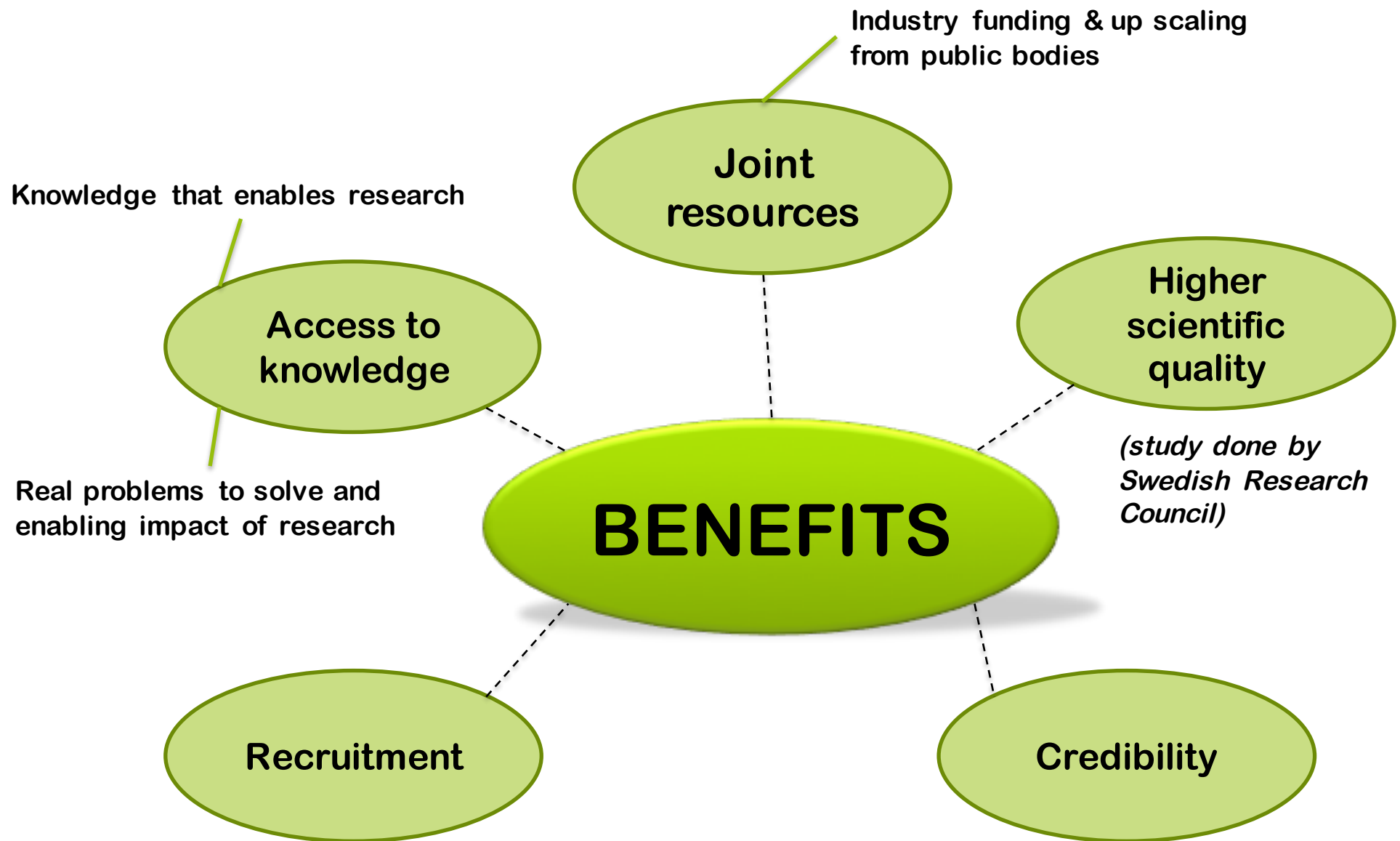




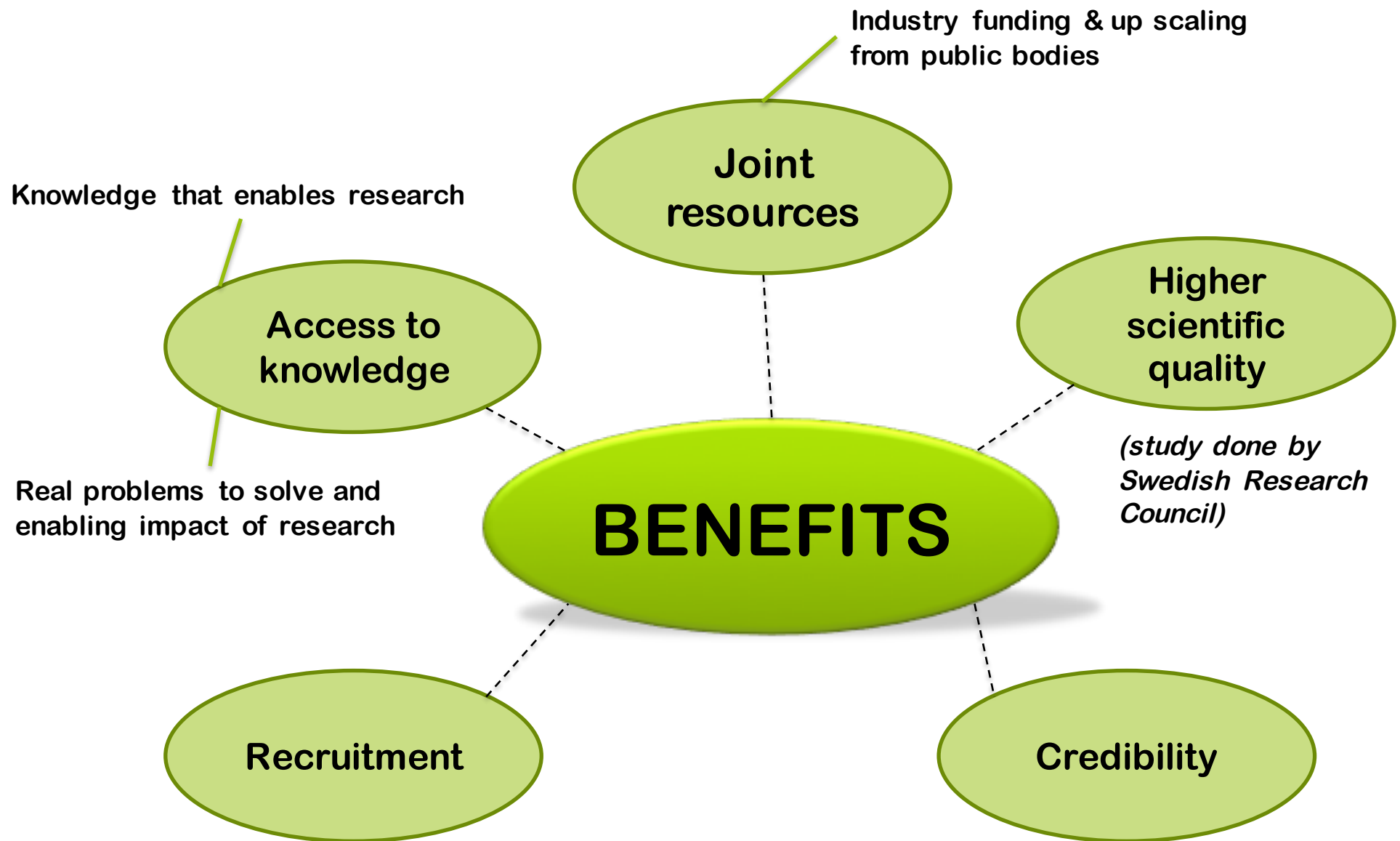


**We know there are benefits in  
collaboration between  
industry and academia**









*..and yes, there are a lot of  
collaboration going on*



# Challenges

- **Anticipation of return of investment**
  - Staying ability
- **Timing**
  - When is what needed where?
- **Responsibilities**
  - Related to impact
- **Cultural differences**
  - Vocabulary/language





# Having challenges means potential for improvement







# Increased focus on IMPACT









Scientific knowledge



## IMPACT



Change that brings  
value and benefit in  
society





Scientific knowledge



**Innovation process**

**IMPACT**



Change that brings  
value and benefit in  
society

**An innovation process implements  
the Impact chain and makes a  
connection between our outputs and  
the intended impact.**





Scientific knowledge

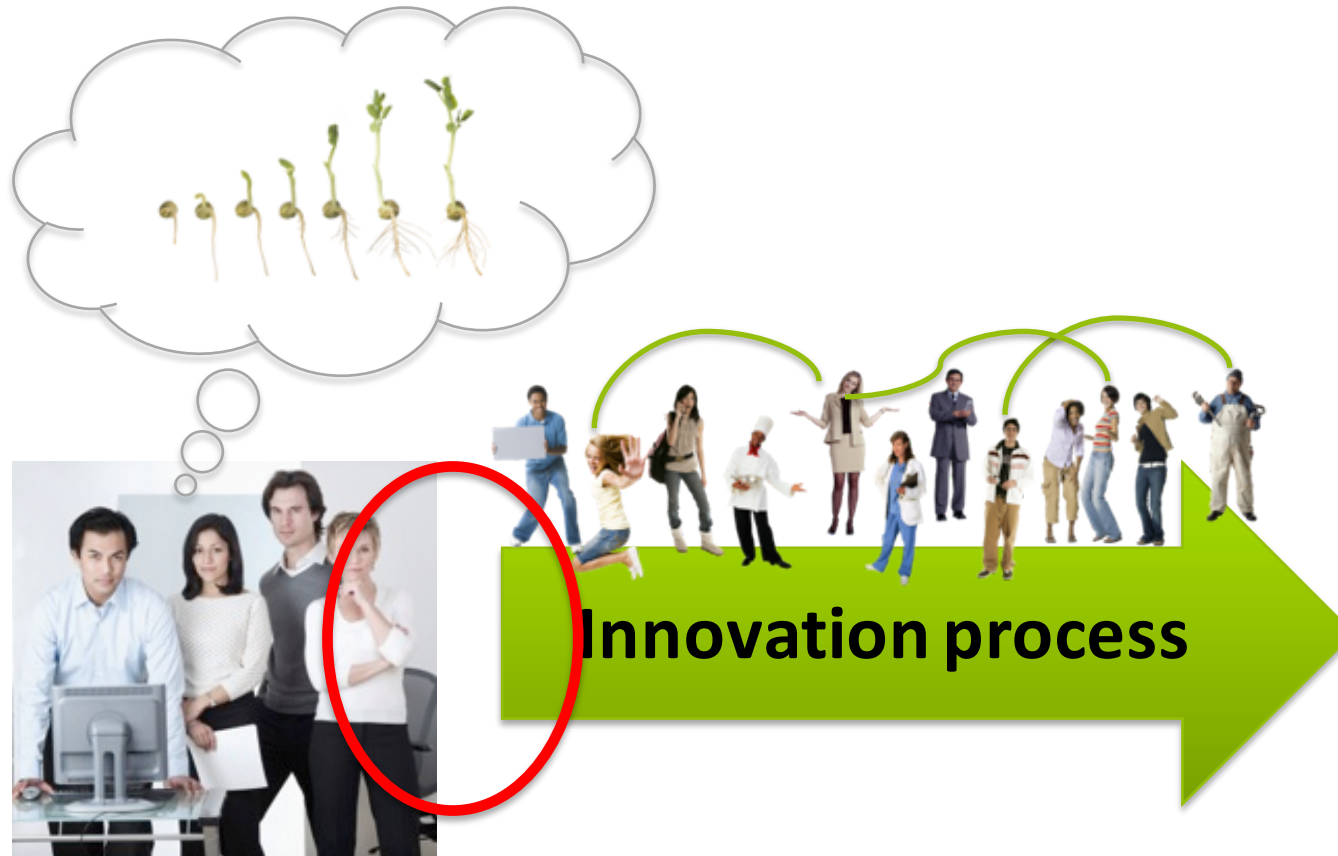


**IMPACT**



Change that brings value and benefit in society





Scientific knowledge

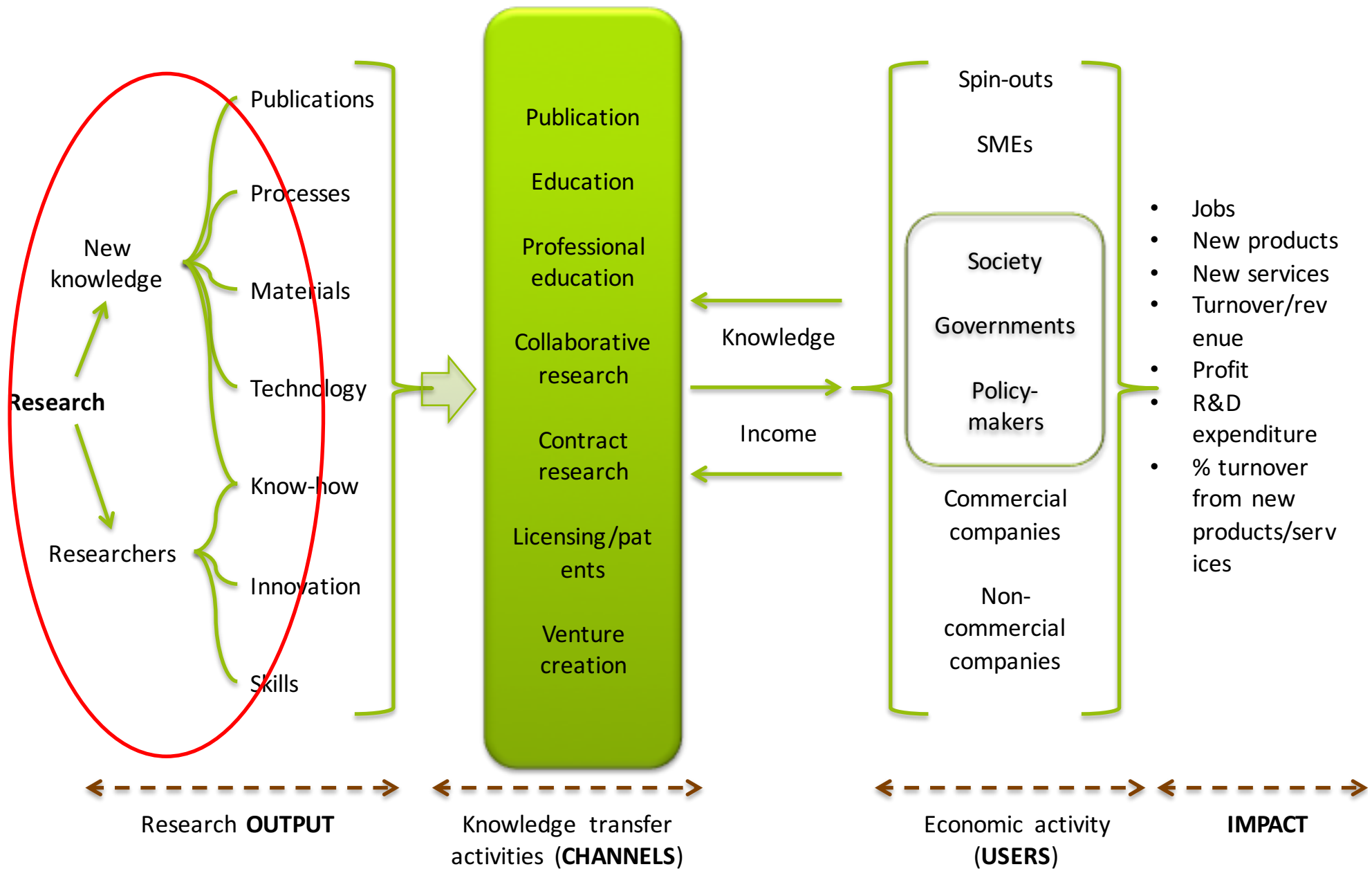
**We operate here.**

# IMPACT



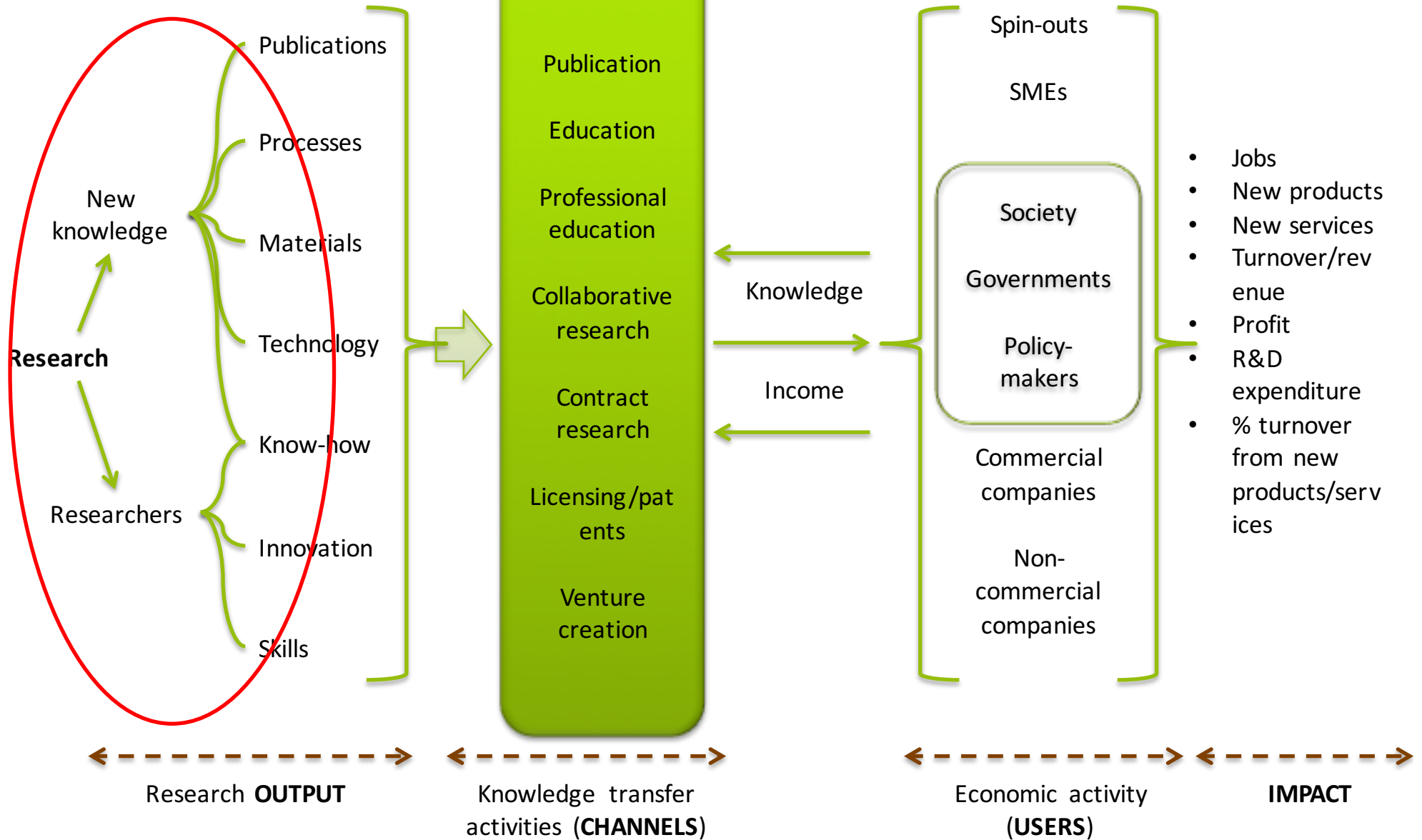
Change that brings  
value and benefit in  
society







5-15 years



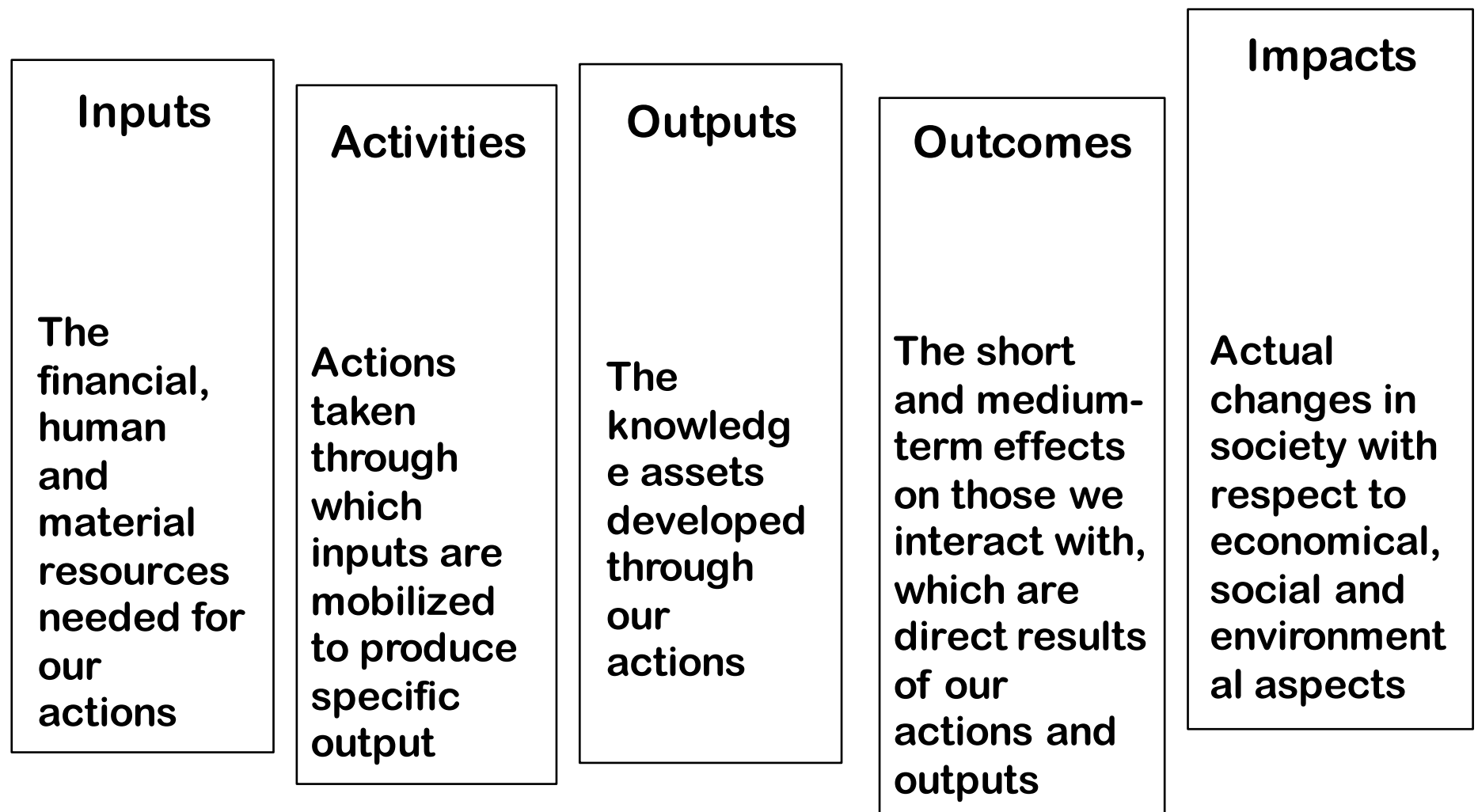


# We need to talk about Impact because:

more and more questions are raised concerning the Impact of "investments" of public funding in scientific research, and...

- (a) we lack systematic methods to **manage and plan** for outcome and impact, and...
- (b) as a consequence of (a), we can improve our ways of **demonstrating impact**, and...
- (c) we could probably achieve even **more impact** if we solve (a) and (b)!









**Inputs**

The financial, human and material resources needed for our actions

**Activities**

Actions taken through which inputs are mobilized to produce specific output

**Outputs**

The knowledge assets developed through our actions

**Outcomes**

The short and medium-term effects on those we interact with, which are direct results of our actions and outputs

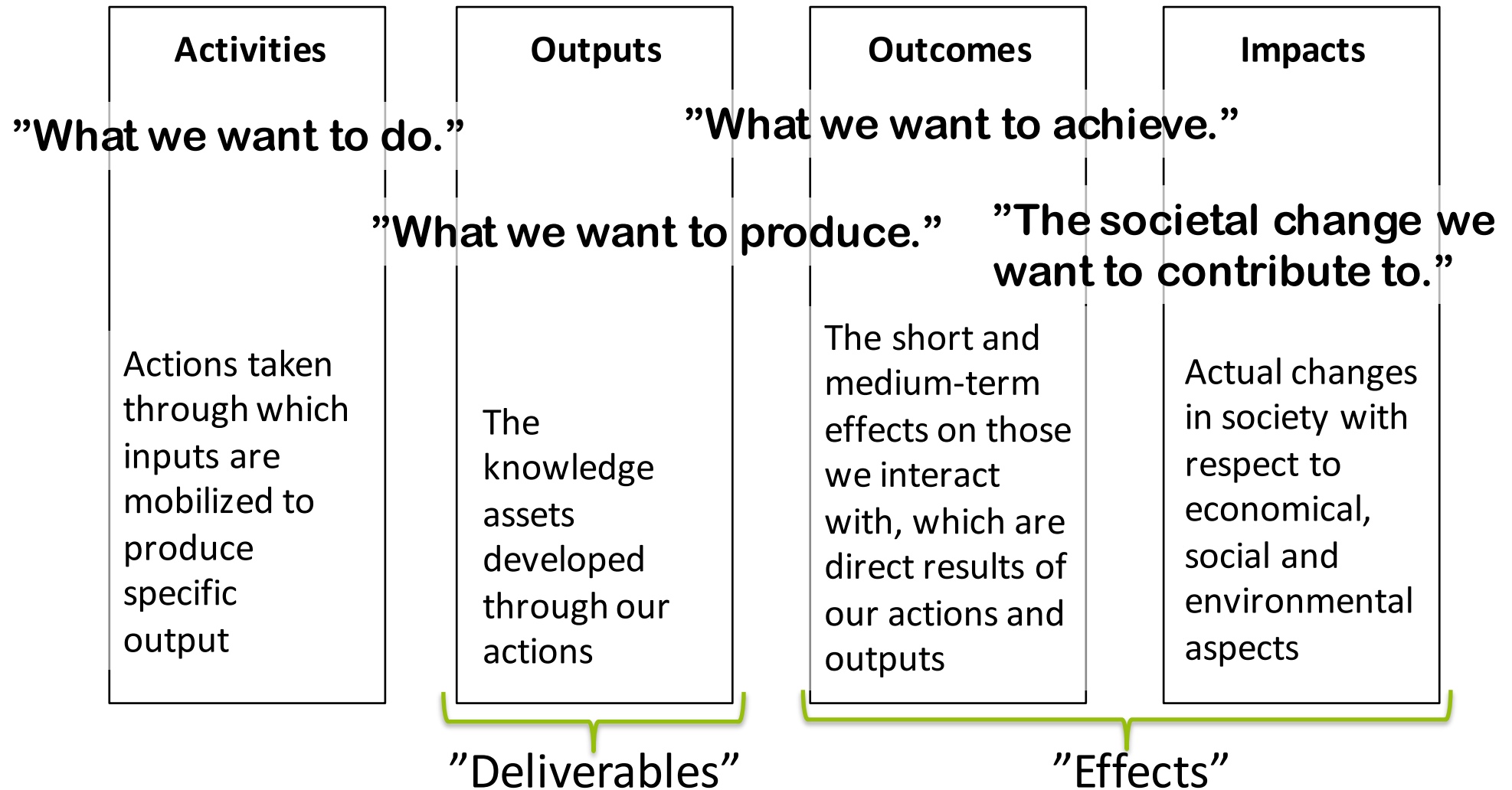
**Impacts**

Actual changes in society with respect to economical, social and environmental aspects





## Impact chain





## Impact chain

### Observation 1:

**Outputs and Activities must generate Outcomes, which must contribute to Impact.**

### Observation 2:

**The Impact chain won't work unless we interact with society.**

"Deliverables"

"Effects"



**We cannot possibly achieve Impact on our own.**

**We are one of many contributors to the innovation process leading to impact.**

**Our core contribution (our *output*) is scientific knowledge.**

**Our role is to *contribute* to the definition/identification of desirable impact and to facilitate innovation processes based on the scientific knowledge that we output.**

**Our role requires us to *interact* with society at many levels.**



**1. We need a systematic "*Impact Process*" – Frameworks and methods for planning and managing impact of research and education activities.**

**2. We need to manage our knowledge more systematically and in ways that facilitate interaction with society.**

**3. We need methods and frameworks for facilitating collaborative innovation processes leading to impact.**

**levels.**



# And...

***Communication....***

- ***Need for understanding each others roles and processes***

***Collaboration should be collaboration, not participation or alibis***





*Thank you for your attention!*



# Creating impact processes

## - *the Chalmers example*

Attitudes ... (not the traditional way of thinking for a researcher)

- Intellectual asset inventory
- Verification of intellectual assets
- Integrated Strategy Design
- Impact circle
  
- Training and seminar actions
- Communication plan including utilisation aspects, including impact stories
- Positioning and agreement advise